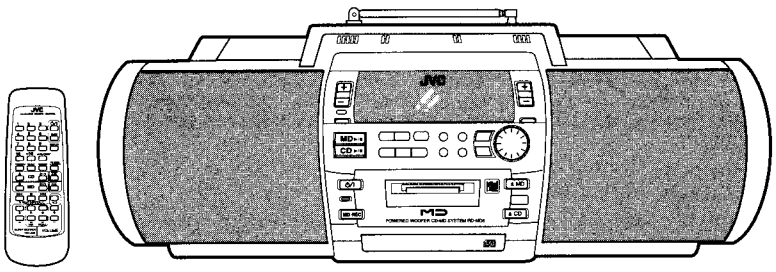
JVC

SERVICE MANUAL

POWERED WOOFER CD-MD SYSTEM

RD-MD5



Area Suffix	
B	U.K.
E	Conttinental Europe
EN	Northern Europe
EE	Russin Federation
UB	Hong Kong
US	Singapore

COMPACT disc DIGITAL AUDIO

Mini Disc

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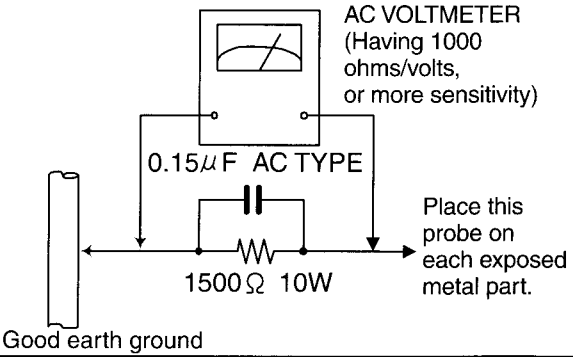
No.20734
Feb. 1999

Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet , particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now reverse the plug in the AC outlet and repeat each measurement voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ **CAUTION** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

Important for Laser Products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches whichprevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. It is dangerous to defeat the safety switches.

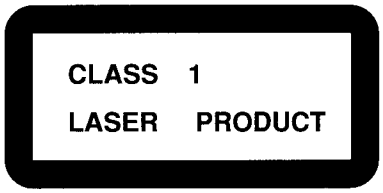
5.CAUTION : If safety switches malfunction, the laser is able to function.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. **VARO :** Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.	**ADVARSEL :** Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. **ADVARSEL :** Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION OF LABELS

1 CLASSIFICATION LABEL, PLACED ON EXTERIOR SURFACE



2 WARNING LABEL, PLACED INSIDE THE UNIT

DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)
VARNING: Osynlig laser-strålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)
ADVARSEL: Usynlig laser -stråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsæt-telse for stråling (d)
VARO: Avattaessa ja suo -jalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

JVC

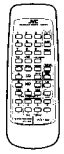
VICTOR COMPANY OF JAPAN, LIMITED

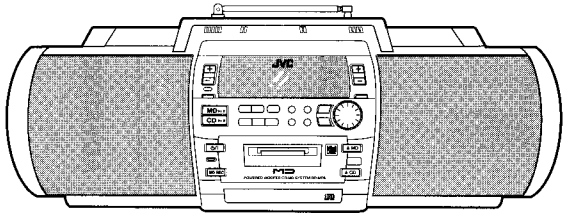
Instructions

JVC

POWERED WOOFER CD-MD SYSTEM

RD-MD5





MiniDisc

COMPACT disc DIGITAL AUDIO

INSTRUCTIONS

For Customer Use:
Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.

Serial No.

LVT0107-006A
[B]

1198MNMCREJEM

Warnings, Cautions and Others

IMPORTANT for the U.K.
DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted.

If nontheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

IMPORTANT:

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

Blue : Neutral
Brown : Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

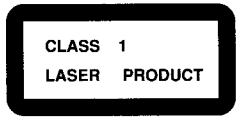
IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.

Caution — ⏻/I switch!
Disconnect the mains plug to shut the power off completely. The ⏻/I switch in any position does not disconnect the mains line. The power can be remote controlled.

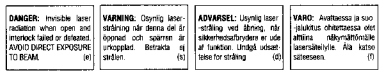
IMPORTANT FOR LASER PRODUCTS

REPRODUCTION OF LABELS

1 CLASSIFICATION LABEL, PLACED ON EXTERIOR SURFACE



2 WARNING LABEL, PLACED INSIDE THE UNIT

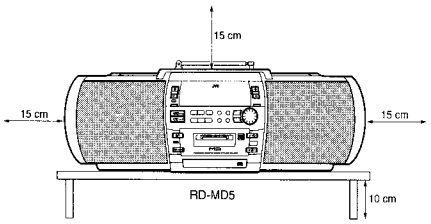

DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)
VARNING: Osynlig laserstrålning när åtkomst del är öppnad och spärren är urkopplad. Betrakta ej strålen. (fi)
ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (d)
VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

1 CLASS 1 LASER PRODUCT
2 **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3 **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

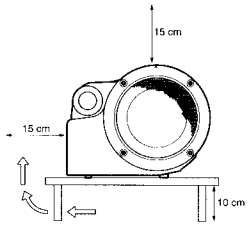
CAUTION
To reduce the risk of electrical shocks, fire, etc.:
1 Do not remove screws, covers or cabinet.
2 Do not expose this appliance to rain or moisture.

Caution: Proper Ventilation
To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:
1 Front: No obstructions and open spacing.
2 Sides/ Top/ Back: No obstructions should be placed in the areas shown by the dimensions below.
3 Bottom: Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.

Front view



Side view



SAFETY INSTRUCTIONS
"SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT"

This equipment has been disigned and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

****

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

****

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way–switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.
Switch off using the switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings.

Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and NEVER fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

— NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case -this could result in a fatal electrical shock.;

— NEVER guess or take chances with electrical equipment of any kind
— it is better to be safe than sorry!

Thank you for purchasing the JVC Powered Woofer CD-MD System.
We hope it will be a valued addition to your home, giving you years of enjoyment.
Be sure to read this instruction manual carefully before operating your new stereo system.
In it you will find all the information you need to set up and use the system.
If you have a query that is not answered by the manual, please contact your dealer.

Features

Here are some of the things that make your System both powerful and simple to use.

- The controls and operations have been redesigned to make them very easy to use, freeing you to just enjoy the music.
  - With JVC's **COMPU PLAY** you can turn on the System and automatically start the Radio, CD Player, MD Player with a single touch.
- The System is equipped with 10-cm dia. super woofers that provide powerful bass.
- The System incorporates an Active Clear Sound circuitry to provide clear high frequency sounds in conjunction with the bass level.
- A 45-station preset capability (30 FM and 15 AM (MW/LW)) in addition to auto-seek and manual tuning.
- Versatile CD options include repeat, random and program play.
- Versatile MD Player provides playback function, recording function, editing function of the tracks in the MD, title function to give title to the MD and tracks.
- Timer functions; set the system to automatically come on, switch off.

How This Manual Is Organized

- Basic information that is the same for many different functions - e.g. setting the volume - is given in the section 'Common Operations', and not repeated under each function.
- The names of buttons/controls and display messages are written in all capital letters: e.g. TUNER BAND, "CD NO DISC".
- System functions are written with an initial capital letter only: e.g. Normal Play.

Use the table of contents to look up specific information you require.
We've enjoyed making this manual for you, and hope it serves you in enjoying the many features built into your System.

IMPORTANT CAUTIONS

1. Where to place the System

- Select a place which is level, dry and neither too hot nor too cold. (Between 5°C and 35°C or 41°F and 95°F.)
- Leave sufficient distance between the System and a TV.
- Do not use the System in a place subject to vibrations.

2. Power cord

- Do not handle the power cord with wet hands!
- Some power is always consumed as long as the power cord is connected to the wall outlet.
- When unplugging the System from the wall outlet, always pull the plug, not the power cord.

3. When carrying the System

- Remove a CD on the tray.
- Disconnect all the cords from the System.

4. Malfunctions, etc.

- There are no user serviceable parts inside. In case of system failure, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the System.

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Getting Started

Accessories

Check that you have all of the following items, which are supplied with the System.

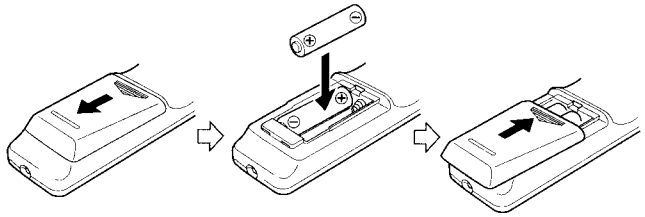
Power Cord (1)
AM Loop Antenna (1)
Remote Control (1)
Batteries (2)

If any of these items are missing, contact your dealer immediately.

How To Put Batteries In the Remote Control

Match the polarity (+ and –) on the batteries with the + and – markings in the battery compartment.

R6P(SUM-3)/AA(15F)



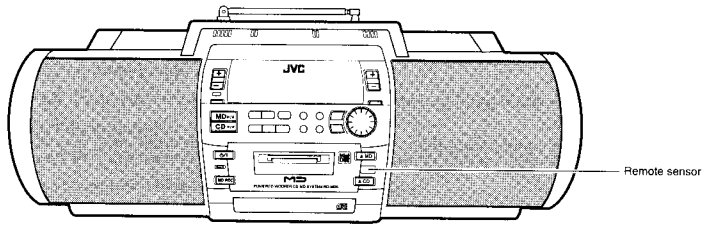
CAUTION: Handle batteries properly.
To avoid battery leakage or explosion:

- Remove batteries when the Remote Control will not be used for a long time.
- When you need to replace the batteries, replace both batteries at the same time with new ones.
- Don't use an old battery with a new one.
- Don't use different types of batteries together.

Using the Remote Control

The Remote Control makes it easy to use many of the functions of the System from a distance of up to 7m (23 feet) away.
You need to point the Remote Control at the remote sensor on the System's front panel.

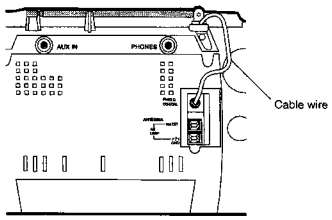
Note: If you point the Remote Control from the slant direction, the above distance will be shortened.



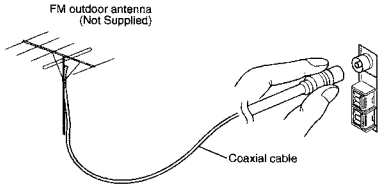
CAUTION: Make all connections before plugging the System into an AC power outlet.

Connecting the FM Antenna

FM broadcast reception is made with the telescopic antenna. Fully extend and turn it to obtain the best reception.

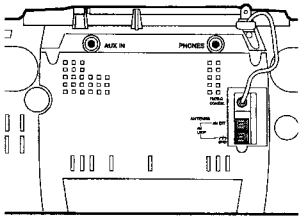


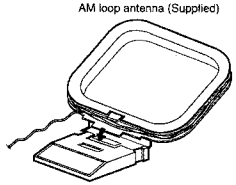
If reception is poor, connect an FM outside antenna (not supplied) as follows.
Disconnect the cable wire from the FM 75-ohm COAXIAL terminal on the back of the System. Then, connect a 75-ohm antenna with coaxial type connector (IEC or DIN45 325) to the FM 75-ohm COAXIAL terminal.



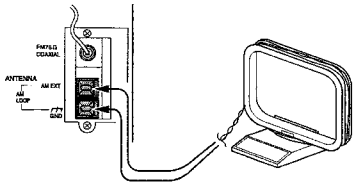
CAUTION: To avoid noise, keep antennas away from the System, the connecting cord and the AC power cord.

Connecting the AM (MW/LW) Antenna





Attach the AM loop to its base by snapping the tabs on the loop into the slot in the base.

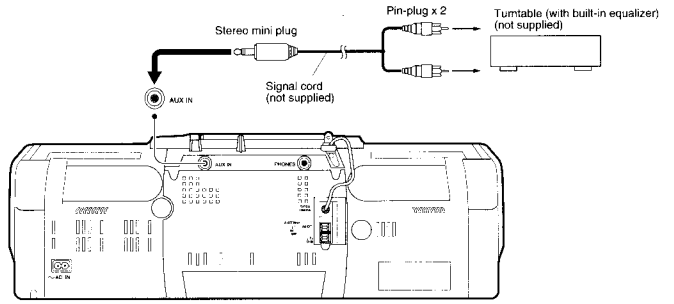


Turn the loop until you have the best reception.

CAUTION: Make all connections before plugging the System into an AC power outlet.

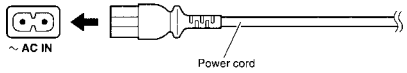
Connecting Auxiliary Equipment

Connect an (not supplied) signal cord between the AUX IN terminal on the System and the output terminals of your auxiliary equipment (e.g. turntable). You can listen to this source.



Connecting the AC Power Cord

Firmly insert the supplied AC power cord into the AC inlet on the back of the Unit.



CAUTIONS:

- **ONLY USE THE JVC POWER CORD PROVIDED WITH THIS SYSTEM TO AVOID MALFUNCTION OR DAMAGE TO THE SYSTEM.**
- **BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE SYSTEM IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.**

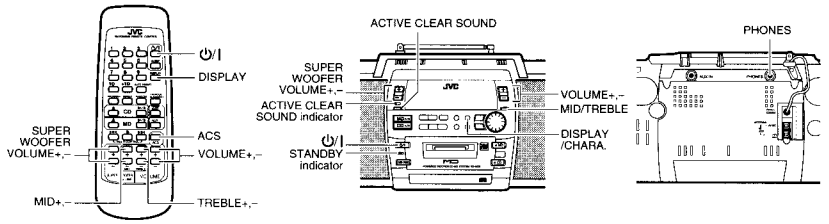
Now you can plug the AC power cord into the wall outlet, and your System is at your command!!

COMPU PLAY

JVC's COMPU PLAY feature lets you control the most frequently used System functions with a single touch.
With One Touch Operation you can play a CD, an MD, or turn on the radio with a single press of the play button for that function. One Touch Operation turns the power on for you, then starts the function you have specified. If the System is not ready (no CD in place, for example), the System still powers on so you can insert a CD.
How One Touch Operation works in each case is explained in the section dealing with that function.
The COMPU PLAY buttons are:

On the Unit	On the Remote Control
CD ▶/II button	CD ▶/II button
TUNER BAND button	TUNER BAND button
MD ▶/II button	MD ▶/II button
AUX button	AUX button

Common Operations



Turning the Power On and Off

Turning the System On

Press the ⏻/I button.

The display comes on and the "STANDBY" indicator goes out.
The System comes on ready to continue in the mode it was in when the power was last turned off.

- For example, if the last thing you were doing was listening to a CD, you are now ready to listen to a CD again. If you wish, you can change to another source.
- If you were listening to the Tuner last, the Tuner comes on playing the station it was last set to.

Turning the System Off

Press the ⏻/I button again.

The "STANDBY" indicator lights up and the display is blank, except for the clock display.

- Some power is always consumed even though power is turned off (called Standby Mode).
- To switch off the System completely, unplug the AC power cord from the AC outlet. When you unplug the AC power cord, the clock will be reset to 0:00 after about 5 minutes, and preset Tuner stations will be erased after about 24 hours.

Adjusting the Volume

You can adjust the volume level between 0 and 50.

Press the VOLUME + button to increase the volume or press the VOLUME – button to decrease it.
When you keep pressed the VOLUME + or – button, the VOLUME indication changes rapidly.

VOLUME 7

CAUTION: DO NOT start playing any source without first setting the VOLUME control to minimum position, as a sudden blast of sound can damage your hearing, speakers and/or headphones.

For private listening

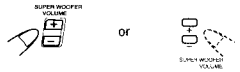
Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers.
Be sure to turn down the volume before connecting or putting on headphones.

Adjusting the Super Woofer Volume

You can adjust the bass level between BASS 1 (minimum) and BASS 6 (maximum). You can use this effect only for playback.

Press the SUPER WOOFER VOLUME + button to increase the bass level or press the SUPER WOOFER VOLUME – button to decrease it.

BASS 6 BASS 6



Note: This function is not effective when the headphones are in use.

Tone Control (MID/TREBLE)

You can control the tone by changing the mid and the treble between –6 and +6. (0: Flat)

Using the Unit

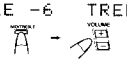
1. Press the MID/TREBLE button to select MID or TREBLE.

Each time you press the button, the display changes as follows.

Current sound source (e.g. FM103.50MHz)→MID 0→TREBLE 0→(back to the beginning)

2. Press the VOLUME + or – button within 4 seconds to adjust the mid/treble level.

MID –6 MID +6
TREBLE –6 TREBLE +6



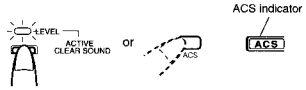
Using the Remote Control

Press the MID+ or MID– button to adjust the mid level between MID – and MID +6.
Press the TREBLE+ or TREBLE– button to adjust the treble level between TREBLE – and TREBLE +6.

ACS (Active Clear Sound) Effect

The Active Clear Sound circuitry emphasizes the high frequency range level in conjunction with the bass level so that you can obtain clear sound at high frequencies. You can use this effect only for playback.

To get the effect, press the ACTIVE CLEAR SOUND button on the Unit or the ACS button on the Remote Control.
The "ACS" indicator lights up and "ACS ON" appears on the display for 3 seconds.
The "ACTIVE CLEAR SOUND LEVEL" indicator on the Unit will light when the Active Clear Sound effect is activated because of great bass level.
To cancel the effect, press the same button again.
The "ACS" indicator goes out and "ACS OFF" appears on the display for 3 seconds.



Note: This function is not effective when playing in monaural.

Showing the Time (CLOCK)

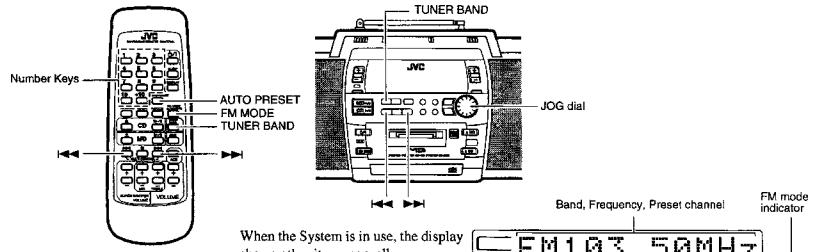
While the power is turned on, you can see the current time (clock) at any time.

Press the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control. Each time the button is pressed, the display changes as follows.

Current sound source (e.g. FM103.50MHz)→Remaining time of the MD (if an MD is inserted)→Clock→(back to the beginning)

Note: To let work the clock, you need to set the clock beforehand. (See "Setting the Clock" on page 21.)

Using the Tuner



When the System is in use, the display shows other items as well.
For simplicity, we show here only the items described in this section.

You can listen to FM and AM (MW/LW) stations. Stations can be tuned in manually, automatically, or from preset memory storage.

■ Before listening to the radio:
- Check that the AM loop antenna is correctly connected. (See page 3).
- Fully extend the FM telescopic antenna.

One Touch Radio

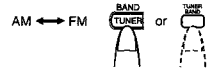
Just press the TUNER BAND button to turn on the System and start playing the station you were last tuned to.

■ You can switch from any other sound source to the radio by pressing the TUNER BAND button.

Tuning to a Station

1 Press the TUNER BAND button.

The Band and Frequency you were last tuned to appear on the display.
Each time you press the button, the band alternates between FM and AM (MW/LW).



2 Select a station using one of the following methods.

■ **Manual Tuning**
Press the ⏮ or ⏭ button repeatedly to move from frequency to frequency until you find the station you want.

OR

■ **Auto Tuning**
If you press and hold the ⏮ or ⏭ button for one second or more, the frequency changes down, or up, automatically until a station is found.

OR

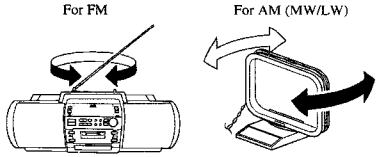
■ **Preset Tuning (Possible only after presetting stations)**
Select the desired preset number (displayed as "P XX" on the display) using the JOG dial or the number keys on the Remote control. After 1 second the display will show the preset number's band and frequency.

P 12→FM103.50MHz

JOG dial: Turn it to the right or left to increase or decrease the preset number.
Number keys: To select P 5, press 5.
To select P 15, press +10 then 5.
To select P 20, press +10 once then press 10.

3 Turn the antenna for best reception.

For an FM broadcast, turn the FM telescopic antenna. If reception is poor, connect an FM outdoor antenna (not supplied) instead of the FM telescopic antenna. (See page 3.)
For an AM (MW/LW) broadcast, place the AM loop antenna for good reception (near the window, for example) and turn it to obtain the best reception.



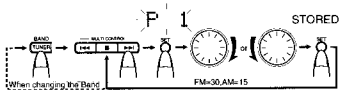
Presetting Stations

Presetting Stations

You can preset up to 30 FM stations and up to 15 AM (MW/LW) stations.

Note: Preset numbers may have been set to factory test frequencies prior to shipment. This is not a malfunction. You can preset the stations you want into memory by following one of the presetting methods below.

Manual Presetting



1 Select a band by pressing the TUNER BAND button.

2 Press the ⏮ or ⏭ button to tune in a station.

3 Press the SET button.
The youngest blank preset number will blink. "P 1" will blink for the first time.

4 Turn the JOG dial to the right or left to select the preset number.

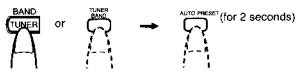
5 Press the SET button.
"STORED" appears and, after 2 seconds, the display returns to the broadcast frequency display.

6 Repeat above steps 1 to 5 for each station you want to store in memory with a preset number.

To cancel the presetting, press the CANCEL button in step 3 or 4.
To change the preset stations, repeat the same steps as above.

Auto Presetting

In each band, you can automatically preset FM-30, AM (MW/LW)-15 stations. Preset numbers will be allocated as stations are found, starting from the lowest station and moving up the frequency.



1 Select a band by pressing the TUNER BAND button.

2 Press the AUTO PRESET button on the Remote Control for more than two seconds.

3 Repeat steps 1-2 for the other band.

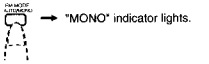
■ If you want to change the preset stations, carry out the Manual Presetting for the desired preset numbers.

CAUTION: If the System is unplugged or if a power failure occurs, the preset stations will be erased after about 24 hours. If this happens, you will need to preset the stations again.

To Change the FM Reception Mode

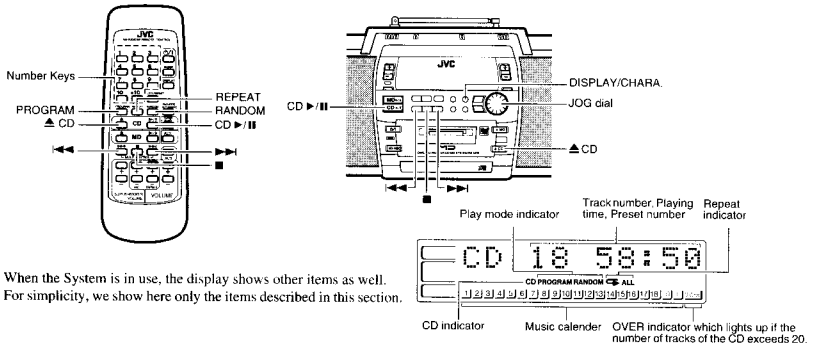
When you are tuned in an FM broadcast, the "STEREO" indicator lights up and you can hear stereo effects.
If an FM stereo broadcast is hard to receive or noisy, you can select Monaural mode. Reception improves, but you lose any stereo effect.

Press the FM MODE button on the Remote Control so that the "MONO" indicator lights up on the display.



To restore the stereo effect, press the FM MODE button on the Remote Control so the "MONO" indicator goes off.
- If you select other FM station, the "MONO" indicator goes out.

Using the CD Player



When the System is in use, the display shows other items as well. For simplicity, we show here only the items described in this section.

You can use Normal, Random, Program or Repeat Play. Repeat Play can repeat all the tracks or just one of the tracks on the CD. Here are the basic things you need to know to play a CD and locate the different tracks on it.

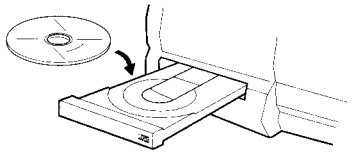
The Quickest Way To Start a CD Is With the One Touch Operation

■ Press the CD▶/II button.
- The power is automatically turned on. If a CD is already inserted, it will start playing from the first track.
- If no CD is inserted, "CD NO DISC" appears on the display and the CD Player remains in Stop mode.

To Insert a CD

1. Press the ▲ CD button on the Unit.
The tray opens.

2. Place a CD, with its label side up as shown below.



3. Press the ▲ CD button again to close the tray.
- To close the tray and play the CD, you can press the CD▶/II button.
- When you press the ⏻/I button to turn off the System, the tray will be automatically closed, if it is open.

■ You can place an 8 cm (3") CD without an adaptor.
■ If the CD cannot be read correctly (because it is scratched, for example), " 0 0:00" appears on the display.
■ You can insert a CD while listening to the other source.

Basics of Using the CD Player-Normal Play

To Play a CD

1. Insert a CD.

2. Press the CD▶/II button.
The first track of the CD begins playing.

CD 1 0:05
Track number Playback time

- The track number that has been played disappears from the music calender.
- The CD Player automatically stops when the last track of the CD has finished playing.

To stop playing the CD, press the ■ button.
The following information for the CD is displayed.

CD 18 50:45
Total track number Total playback time

To stop playing and remove the CD, press the ▲CD button to open the tray.
To pause, press the CD▶/II button. The playback time blinks on the display.
To cancel pause, press the same button again. Play continues from the point where it was paused.

Locating a Track with Remote Control Directly

During playback or in Stop mode, press the number keys on the Remote Control to directly play a track.
To directly play the track 5, press 5.
To directly play the track 15, press +10 then 5.
To directly play the track 20, press +10 once then press 10.

To Select a Track

During playback, press the ⏮ or ⏭ button or turn the JOG dial to select the track you want.
The selected track starts playing.
- Press the ⏭ button once or turn the JOG dial to the right by 1 click to skip to the beginning of the next track.
- Press the ⏮ button or turn the JOG dial to the left by 1 click to skip to the beginning of the track being played. Press the ⏮ button twice quickly or turn the JOG dial to the left by 2 clicks quickly to skip to the beginning of the previous track.

You can also select a track in Stop mode with the same buttons and the JOG dial.
When the button is pressed or the JOG dial is turned, the selected track and its playback time appear on the display. To play the CD after selecting a track, just press the CD▶/II button.

Search Play

Holding down the ⏮ or ⏭ button, during playback, will fast forward/backwards the CD so you can quickly find a particular passage in the track you are listening to. During Search Play, you can hear the sound of approx. one forth level.

Programming the Playing Order of the Tracks

You can program the playing order of the tracks using the Remote Control.
■ You can program up to 20 tracks in any desired order including the same tracks.
■ You can only make a program when the CD Player is stopped.

1. Insert a CD.

2. Press the CD▶/II button.

3. Press the ■ button to stop the CD.

4. Press the PROGRAM button.
The System enters the programming mode and the "PROGRAM" indicator lights up.

PROGRAM → CD -- -- P -- --
CD PROGRAM

5. Press the number keys to select the track to program.
To select the track 5, press 5.
To select the track 15, press +10 then 5.
To select the track 20, press +10 once then press 10.
- Example: for track 2, press 2

Program order number

CD 2 P 1
(After 2 seconds)
CD 2 3:57
Total playback time of the programmed tracks

6. Repeat step 5 to select the other tracks for the program.
You can see the total playback time of programmed tracks on the display. Also, you can see the programmed tracks on the music calender.
To cancel the last track programmed, press the ■ button once.

7. Press the CD▶/II button.
The System plays the tracks in the order you have programmed them.
■ You can skip to a particular program track by pressing the ⏮ or ⏭ button or by turning the JOG dial during Program Play.

To confirm the programmed tracks while the CD player is stopped, press the ⏮ or ⏭ button or turn the JOG dial; the tracks making up the program will successively be displayed in the programmed order.

To delete all the tracks in the program, press the ■ button repeatedly until all the tracks are cleared. Turning off the power or pressing the ▲CD button to open the tray will also clear the programmed tracks.
To exit Program mode once, while the CD Player is stopped, press the PROGRAM button to light off the "PROGRAM" indicator. To restore Program mode, in Stop mode, press the same button to light on the "PROGRAM" indicator.
Notes:
- If the total playback time of the programmed tracks exceeds 99 minutes 59 seconds, the total playback time will go out on the display.
- When the CD contains more than 21 tracks:
  When you try to program a track number exceeding 20 (for example the 25th track), the total playback time indication will go out, though programming is possible.

To Modify the Program

Modify the contents of the program while the CD Player is stopped. Each time you press the ■ button, the last track in the program is deleted. To add new tracks to the end of the program, repeat above steps 5 and 6.

Random Play

The tracks will play in no special order when you use this mode.

1. Press the RANDOM button on the Remote Control.
The "RANDOM" indicator lights up on the display.

2. Press the CD▶/II button.
The tracks are played in random order once.
To skip a track during playback, press the ⏭ button or turn the JOG dial to the right to jump to the next track in the random sequence. Press the ⏮ button or turn the JOG dial to the left to jump back to the start of a track being played.
To exit Random Play mode, press the RANDOM button to light off the "RANDOM" indicator after pressing the ■ button to stop the CD Player, press the ▲CD button to open the tray, or turn off the power.

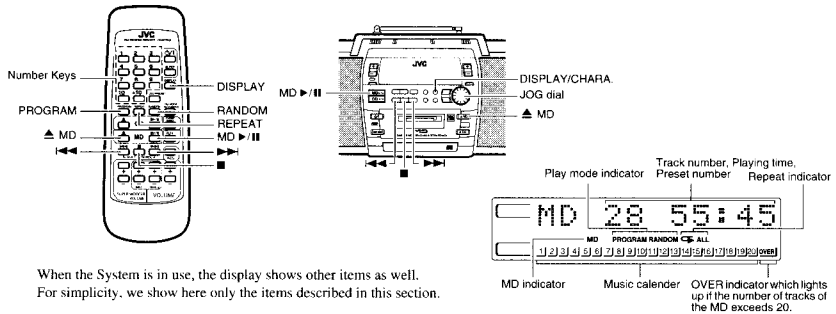
Repeating Tracks

You can repeat the tracks or individual track as many times as you like.

Press the REPEAT button on the Remote Control.
The Repeat indicator changes with each press of the button, as shown below.
⊂ → ⊂ **ALL** → **blank display** → (back to the beginning)
⊂ : Repeats one track.
⊂ **ALL** : In Normal Play mode, repeats all the tracks.
In Program Play mode, repeats all the tracks in the program.
In Random Play mode, repeats all the tracks in random order.

To exit Repeat mode, press the REPEAT button until the Repeat indicator on the display goes out.
■ In Random Play, as a matter of course, ⊂ cannot be selected.
■ Repeat mode remains in effect even when you change the play mode.

Using the MD Player (Listening to an MD)



When the System is in use, the display shows other items as well. For simplicity, we show here only the items described in this section.

You can use Normal, Random, Program or Repeat Play in the same way as for CD Player. Repeat Play can repeat all the tracks or just one of the tracks on the MD.
Here are the basic things you need to know to play an MD and locate the different tracks on it.

The Quickest Way To Start an MD Is With the One Touch Operation

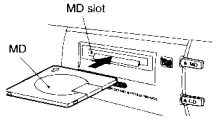
■ Press the MD▶/II button.

- The power is automatically turned on. If an MD is already inserted, it will start playing from the first track.
- If no MD is inserted, "MD NO DISC" appears on the display and the MD Player remains in Stop mode.

To Insert an MD

■ Insert an MD into the MD slot.
Insert it with its label side up and the ▷ or ⇨ mark of the MD directs as shown in the figure.
The MD is automatically drawn inside the MD Player.
When the function is set to MD, the display automatically changes as follows.
Loading→TOC Reading→Disc title, if it is given→Total track number and total playback time (e.g.: MD 28 55:45)

- The music calender also appears on the display.



■ You can insert an MD while listening to the other source.

Basics of Using the MD Player - Normal Play

To Play an MD

1. Insert an MD.

2. Press the MD ▶/II button.
The first track of the MD begins playing.

MD 1 0:05
Track number / Playing time

- The tracks in the MD appear on the music calender.
- The track number that has been played disappears from the music calender.
- The MD Player automatically stops when the last track of the MD has finished playing.

■ If the track has the title, the track title will be displayed before playing the track.
You can give the disc title and the track title as required. (See page 18.)

To stop playing the MD, press the ■ button. The following information for the MD is displayed after the disc title appears for 2 seconds if it is given.

MD 28 55:45
Total track number / Total playback time

To stop playing and remove the MD, press the ▲MD button to eject the MD.
To pause, press the MD▶/II button. The playback time blinks on the display.
To cancel pause, press the same button again. Play continues from the point where it was paused.

Displaying the Disc/Track Title

You can display the disc title of the MD in Stop mode and the track title during playback.

Displaying the Disc Title:
In Stop mode, press the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control.
Each time you press the button, the display changes as follows.

Total track number and total playback time→Disc title→Remaining time (recordable capacity) of MD (e.g. REM. 23:00)→Clock→(back to the beginning)

During playing back, press the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control.
Each time you press the button, the display changes as follows.

Track number and playback time for the track being played →Track title→Remaining time (recordable capacity) of MD (e.g. REM. 23:00)→Clock→(back to the beginning)

Locating a Track with Remote Control Directly

During playback or in Stop mode, press the number keys on the Remote Control to directly play a track.
To directly play the track 5, press 5.
To directly play the track 15, press +10 then 5.
To directly play the track 20, press +10 once then press 10.

To Select a Track

During playback, press the I◀◀ or ▶▶I button or turn the JOG dial to select the track you want.
The selected track starts playing.

- Press the ▶▶I button once or turn the JOG dial to the right by 1 click to skip to the beginning of the next track.
- Press the I◀◀ button or turn the JOG dial to the left by 1 click to skip to the beginning of the track being played. Press the I◀◀ button twice quickly or turn the JOG dial to the left by 2 clicks quickly to skip to the beginning of the previous track.

You can also select a track in Stop mode with the same buttons and the JOG dial.
When the button is pressed or the JOG dial is turned, the selected track and its playback time appear on the display. To play the MD after selecting a track, just press the MD▶/II button.

Search Play

Holding down the I◀◀ or ▶▶I button, during playback, will fast forward/backwards the MD so you can quickly find a particular passage in the track you are listening to. During Search Play, you can hear the sound of approx. one forth level.

Programming the Playing Order of the Tracks

You can program the playing order of the tracks using the Remote Control.

■ You can program up to 32 tracks in any desired order including the same tracks.

■ You can only make a program when the MD Player is stopped.

1. Insert an MD.

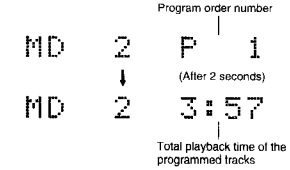
2. Press the MD▶/II button.

3. Press the ■ button to stop the MD.

4. Press the PROGRAM button.
The System enters the programming mode and the "PROGRAM" indicator lights up.

5. Press the number keys to select the track to program.
To select the track 5, press 5.
To select the track 15, press +10 then 5.
To select the track 20, press +10 once then press 10.

- Example: for track 2, press 2.



6. Repeat step 5 to select the other tracks for the program.
You can see the total playback time of programmed tracks on the display. Also, you can see the programmed tracks on the music calender.

- To cancel the last track programmed, press the ■ button once.

7. Press the MD▶/II button.
The System plays the tracks in the order you have programmed them.

■ You can skip to a particular program track by pressing the I◀◀ or ▶▶I button or by turning the JOG dial during Program Play.

■ To stop playing, press the ■ button once.

To confirm the programmed tracks while the MD player is stopped, press the I◀◀ or ▶▶I button or turn the JOG dial; the tracks making up the program will successively be displayed in the programmed order.
To delete all the tracks in the program, press the ■ button repeatedly until all the tracks are cleared. Turning off the power or pressing the ▲MD button to eject the MD will also clear the programmed tracks.
To exit Program mode once, while the MD Player is stopped, press the PROGRAM button to light off the "PROGRAM" indicator. To restore Program mode, in Stop mode, press the same button to light on the "PROGRAM" indicator.
Notes:

- If the total playback time of the programmed tracks reaches 150 minutes, the total playback time will go out on the display.
- When you programmed the 21st track, the OVER indicator will light up.

To Modify the Program

Modify the contents of the program while the MD Player is stopped. Each time you press the ■ button, the last track in the program is deleted. To add new tracks to the end of the program, repeat above steps 5 and 6.

Random Play

The tracks will play in no special order when you use this mode.

1. Press the RANDOM button on the Remote Control.
The "RANDOM" indicator lights up on the display.

2. Press the MD▶/II button.
The tracks are played in random order once.
To skip a track during playback, press the ▶▶I button or turn the JOG dial to the right to jump to the next track in the random sequence. Press the I◀◀ button or turn the JOG dial to the left to jump back to the start of a track being played.
To exit Random Play mode, press the RANDOM button to light off the "RANDOM" indicator after pressing the ■ button to stop the MD Player, press the ▲MD button to eject the MD, or turn off the power.

Repeating Tracks

You can repeat the tracks or individual track as many times as you like.

Press the REPEAT button on the Remote Control.

The Repeat indicator changes with each press of the button, as shown below.

↻ → ↻ **ALL** → **blank display** → (back to the beginning)

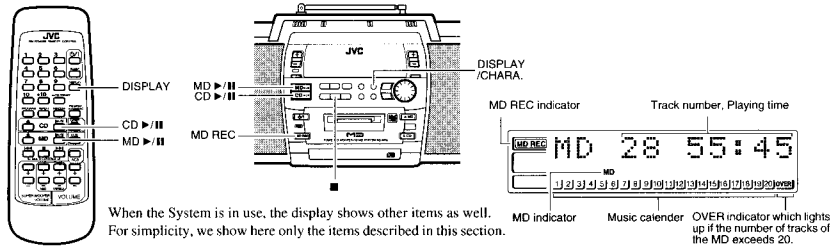
↻ : Repeats one track.

↻ **ALL** : In Normal Play mode, repeats all the tracks.
In Program Play mode, repeats all the tracks in the program.
In Random Play mode, repeats all the tracks in random order.

To exit Repeat mode, press the REPEAT button until the Repeat indicator on the display goes out.

- In Random Play, as a matter of course, ↻ cannot be selected.
- Repeat mode remains in effect when you change the play mode.

Recording onto an MD



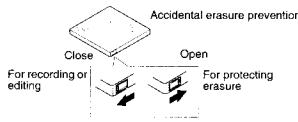
When the System is in use, the display shows other items as well. For simplicity, we show here only the items described in this section.

Recording onto an MD from any of the sound sources is simple. Just insert an MD to the Unit, have the source ready, make one or two settings, and you are ready to record. For each source, the procedure is a little bit different so we explain each separately. But first, here are a few things to make your recordings better.

Things To Know Before You Start

Recording

- **It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.**
- **Carefully read the "Rules of Digital Dubbing" on page 24.**
- The MD Recorder supports the following sampling frequency for the CD Player of the Unit as a digital source.
  Sampling frequency: 44.1 kHz.
- The recording level, which is the volume at which the new MD is being made, is automatically set correctly, so it is not affected by the VOLUME level of the System. Nor it is affected by adjusting the sound effects. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- Note that it takes 10 seconds until the MD REC button becomes effective after the MD has been inserted.
- The accidental erasure prevention knob is provided on the back of an MD cartridge to prevent accidental erasure or recording. It must be set to the close position beforehand.



- When you stick an adhesive label onto the MD cartridge, adhere it securely. If it peels off, ejection trouble, etc. will occur.

Preparation Before Recording

- Be sure that the MD is not the Play-only type one.
- Be sure that the accidental erasure prevention knob of the MD cartridge is set to the close position. Otherwise, "DISC PROTECTED" will appear when you try to record a signal to the MD.
- Be sure that the MD has enough space for recording. If not, carry out ALL ERASE or ERASE function to erase all the tracks or desired tracks in the MD. (See pages 17 and 18.) You can check the recordable remaining time of the MD in Stop mode or during recording by pressing the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control.

(See "Checking the Remaining Time of the MD for CD Synchro Recording" mentioned on page 15.)

Standard Recording

You can record from the tuner or an auxiliary equipment to an MD as follows.

1 Insert a MD with its label side up.

2 Prepare one of the sources.

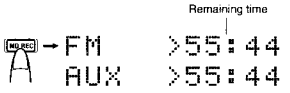
Tuner: Tune in to a station.

AUX IN: Press the AUX button and play the auxiliary equipment.

- For recording from the CD, see "CD Synchro Recording" on page 15.

3 Press the MD REC button on the Unit to start recording.

The "MD REC" indicator lights up on the display and the track number is increased by 1. When recording starts, the remaining time (recordable capacity) appears on the display.



4 Press the ■ button to stop recording.

The "MD REC" indicator goes out and "UTOCwriting" appears on the display, indicating that the recording is successfully completed. Then, the MD stops.

- If the MD becomes full before pressing the ■ button, the recording will be terminated after indicating "UTOCwriting".

To pause the recording, press the MD REC button on the Unit. The "MD REC" indicator starts blinking on the display and the track number is increased by 1 for the next recording.

To cancel pause, press the MD REC button on the Unit again. The "MD REC" indicator lights up on the display and recording resumes.

Checking the Remaining Time of the MD for Tuner/AUX Recording

You can see the recordable remaining time of the MD in Stop mode.

In Stop mode, press the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control. Each time you press the button, the display changes as follows.

Sound source→Remaining time (recordable capacity) of MD (e.g. REM. 23:00)→Clock→(back to the beginning)

Track Marking for Tuner/AUX Recording

- Whenever no sound at the playback side continues for 3 or more seconds, the track number at the MD side is automatically increased by 1.
- The track number at the MD side is automatically increased by 1 by pressing the SET button on the Unit at the desirable location.

CD Synchro Recording

Everything on the CD goes onto the MD in the order it is on the CD, or according to the order you have set in the program. (See page 10 for programming the CD tracks.)

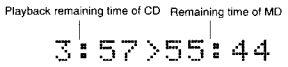
1. Insert an MD with its label side up.

2. Insert a CD. (See page 9.)

3. Press the CD▶/II button and then press the ■ button to stop the CD.

4. Press the MD REC button on the Unit.

The "MD REC" indicator lights up on the display and the track number is increased by 1.
Then the digital recording from the CD to the MD starts. The playback remaining time for the track being played and the remaining time of the MD appear on the display.



- After the CD Player has played the entire CD or all the programmed tracks, "UTOCwriting" appears on the display, indicating that the recording is successfully completed. Then, the MD and the CD stops.
- When the MD becomes full before the CD Player finishes playback, the MD stops after indicating "UTOCwriting".

One Track Recording

1. Insert an MD with its label side up.

2. Play the track on the CD you wish to record.

3. Press the MD REC button on the Unit.

The CD Player returns to the beginning of that track and the track is recorded on the MD. After recording, the CD Player and MD Player automatically stop.

Checking the Remaining Time of the MD for CD Synchro Recording

You can see the recordable remaining time of the MD in Stop mode or during the CD Synchro Recording.

In Stop mode, press the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control. Each time you press the button, the display changes as follows.
Total track number and total playback time for the MD→Remaining time (recordable capacity) of MD (e.g. REM. 23:00)→Clock→ (back to the beginning)

During the CD Synchro Recording, press the DISPLAY/CHARA. button on the Unit or the DISPLAY button on the Remote Control. Each time you press the button, the display changes as follows.
Playback remaining time for the CD's track being played and the remaining time of the MD→Track number of the CD and the MD (e.g.: CD 1>MD 19)→CD's track number and its playback time→Clock→(back to the beginning)

Track Marking for CD Synchro Recording

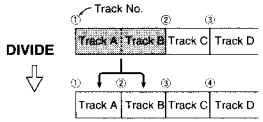
Whenever playback advances from one track to another, the track number at the MD side is automatically increased by 1.

Using the MD Player (Editing)

In addition to its recording and play functions, the MD Player comes with editing functions. You can divide, join, move, or erase the recorded tracks in the MD as required. Also, you can give a disc title to the MD and track titles to the tracks in the MD.

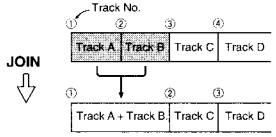
Dividing tracks (DIVIDE function)

This involves adding a track mark (see Note) at some point during the track which is to be made into the start of an additional track so that the original track is divided into two tracks.



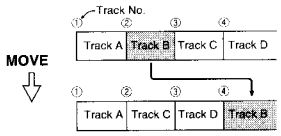
Joining tracks (JOIN function)

This involves erasing a track mark and turning two adjoining tracks into one track.



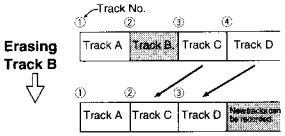
Moving tracks (MOVE function)

Tracks can be moved around so that they are in the desired sequence.



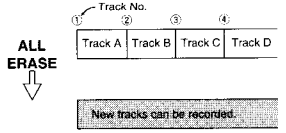
Erasing tracks (ERASE function)

This enables unnecessary tracks, Narration, etc. to be erased speedily. The erased parts do not remain as silences but are closed up by the subsequent tracks.



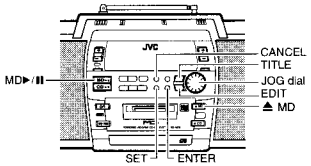
Erasing all the tracks (ALL ERASE function)

All the tracks can be erased at once without recording fresh material over them.

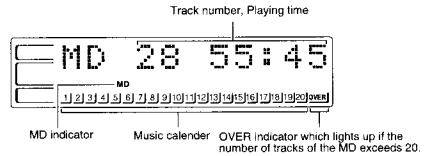


Giving titles to discs and tracks (TITLE function)

A title consisting of up to 32 characters can be given to a disc and a track. The title given appears in the display window.



Note: Track marks
These marks are provided to locate the start of each track. Whatever lies between one track mark and the next is considered to a track, and the numbers of the tracks (called "track numbers") are displayed in the sequence in which they are to be played.


Track number, Playing time
MD 28 55:45
MD
MD indicator
Music calender
OVER indicator which lights up if the number of tracks of the MD exceeds 20.

When the System is in use, the display shows other items as well.
For simplicity, we show here only the items described in this section.

Dividing Tracks (DIVIDE Function)

■ Use the Unit to carry out this function.

1. Insert an MD to be edited with its label side up.

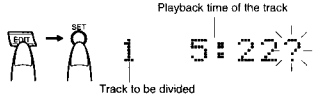
2. Press the MD▶/II button and then ■ button to set the function to MD.

The track numbers and total playback time are displayed.

3. Press the EDIT button until "DIVIDE ?" is displayed.

Each time you press the button, the display changes as follows.
Current display→DIVIDE→JOIN→MOVE→ERASE→ALL ERASE→(back to the beginning)

4. Press the SET button.

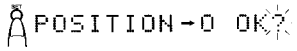


5. Select the track number to be divided.

Press the I◄◄ or ►►I button or turn the JOG dial to select the track.

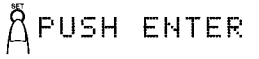
The selected track is automatically played.

6. Press the SET button at the point where the track is to be divided.



- The selected track is divided into two tracks and the track number in the music calender will increase by 1.
- The recording lasting for 4 seconds starting where the track was divided is repeatedly played for your reference. Movement is possible within the POSITION-128 to 128 range (about 8 seconds before or after the position). Turn the JOG dial to adjust the position to be divided. The recording lasting for 4 seconds starting from the position to which the dividing point has been moved is repeatedly played.

7. Press the SET button.



8. Press the ENTER button.

The selected track is divided into two tracks and the number of tracks increases by 1. The new total track number and the total playback time appear on the display.

9. Press the ▲MD button to complete editing.

The MD is ejected after "UTOCwriting" is displayed.

- You can also complete editing operation by pressing the ⏻/| button to turn off the power.

To cancel the operation, press the CANCEL button in step 4, 5, or 7 until the display returns to the original display before editing the track.

Note: While "UTOCwriting" is displayed, do not disconnect the power cord or subject the Unit to the vibration to avoid incorrect recording.

Joining Tracks (JOIN Function)

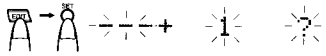
■ Use the Unit to carry out this function.

1. Insert an MD to be edited with its label side up.

2. Press the MD▶/II button and then ■ button to set the function to MD.
The track numbers and total playback time are displayed.

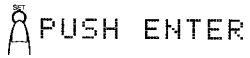
3. Press the EDIT button until "JOIN ?" is displayed.
Each time you press the button, the display changes as follows.
Current display→DIVIDE→JOIN→MOVE→ERASE→ALL ERASE→(back to the beginning)

4. Press the SET button.



5. Select the track number to be joined.
Press the I◀◀ or ▶▶I button or turn the JOG dial to select the track.

6. Press the SET button.



7. Press the ENTER button.
The selected track and the previous track are joined and the number of tracks decreases by 1. The new total track number and the total playback time appear on the display.

8. Press the ▲MD button to complete editing.
The MD is ejected after "UTOCwriting" is displayed.
- You can also complete editing operation by pressing the ⏻/| button to turn off the power.

To cancel the operation, press the CANCEL button in step 4, 5, or 6 until the display returns to the original display before editing the track.

Note: While "UTOCwriting" is displayed, do not disconnect the power cord or subject the Unit to the vibration to avoid incorrect recording.

Moving Tracks (MOVE Function)

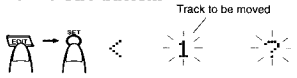
■ Use the Unit to carry out this function.

1. Insert an MD to be edited with its label side up.

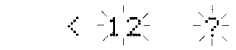
2. Press the MD▶/II button and then ■ button to set the function to MD.
The track numbers and total playback time are displayed.

3. Press the EDIT button until "MOVE ?" is displayed.
Each time you press the button, the display changes as follows.
Current display→DIVIDE→JOIN→MOVE→ERASE→ALL ERASE→(back to the beginning)

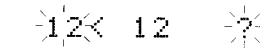
4. Press the SET button.



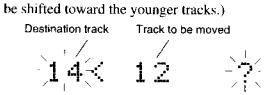
5. Select the track number to be moved.
Press the I◀◀ or ▶▶I button or turn the JOG dial to select the track.
Example: Track number 12.



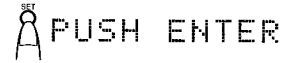
6. Press the SET button.



7. Select the destination to which the track is to be moved.
To select the track number, press the I◀◀ or ▶▶I button or turn the JOG dial to select the track.
In this example, the 12th track will move to the 14th track.
(Since, the 12th track is lost, the upper tracks than the 12th one will be shifted toward the younger tracks.)



8. Press the SET button.



9. Press the ENTER button.
The selected tracks are moved. The total track number and the total playback time appear on the display.

10. Press the ▲MD button to complete editing.
The MD is ejected after "UTOCwriting" is displayed.
- You can also complete editing operation by pressing the ⏻/| button to turn off the power.

To cancel the operation, press the CANCEL button in step 4 through 8 until the display returns to the original display before editing the track.

Note: While "UTOCwriting" is displayed, do not disconnect the power cord or subject the Unit to the vibration to avoid incorrect recording.

Erasing Tracks (ERASE Function)

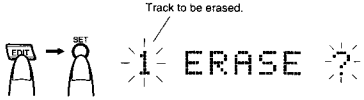
■ Use the Unit to carry out this function.

1. Insert an MD to be edited with its label side up.

2. Press the MD▶/II button and then ■ button to set the function to MD.
The track numbers and total playback time are displayed.

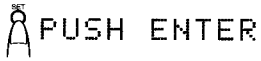
3. Press the EDIT button until "ERASE ?" is displayed.
Each time you press the button, the display changes as follows.
Current display→ DIVIDE→ JOIN→ MOVE→ ERASE→ ALL ERASE→ (back to the beginning)

4. Press the SET button.



5. Select the track number to be erased.
Press the I◀◀ or ▶▶I button or turn the JOG dial to select the track.

6. Press the SET button.



7. Press the ENTER button.
The selected track is erased and the number of tracks decreases by 1. The new total track number and the total playback time appear on the display.

8. Press the ▲ MD button to complete editing.
The MD is ejected after "UTOCwriting" is displayed.
- You can also complete editing operation by pressing the ⏻/| button to turn off the power.

To cancel the operation, press the CANCEL button in step 4, 5, or 6 until the display returns to the original display before editing the track.

Note: While "UTOCwriting" is displayed, do not disconnect the power cord or subject the Unit to the vibration to avoid incorrect recording.

Erasing all the Tracks (ALL ERASE Function)

■ Use the Unit to carry out this function.

1. Insert an MD to be edited with its label side up.

2. Press the MD▶/II button and then ■ button to set the function to MD.
The track numbers and total playback time are displayed.

3. Press the EDIT button until "ALL ERASE ?" is displayed.
Each time you press the button, the display changes as follows.
Current display→DIVIDE→JOIN→MOVE→ERASE→ALL ERASE→(back to the beginning)

4. Press the SET button.

5. Press the ENTER button.
All the tracks in the MD are erased and "BLANK DISC" is kept displayed.

6. Press the ▲MD button to complete editing.
The MD is ejected after "UTOCwriting" is displayed.
- You can also complete editing operation by pressing the ⏻/|button to turn off the power.

To cancel the all erasing, press the CANCEL button in step 4.

Note: While "UTOCwriting" is displayed, do not disconnect the power cord or subject the Unit to the vibration to avoid incorrect recording.

Giving Titles to MD (DISC TITLE/TITLE Function)

You can give a disc title to the MD and a track title to the tracks in the MD. Any title name can be given up to 32 characters using the provided character sets.
The disc title you have given will be displayed in the following cases.
- When you insert the MD while the function is set to MD.
- When you press the MD▶/II button and then ■ button to set the function to MD.

Once you have given the title to the tracks, the track title will be displayed before playing the track.

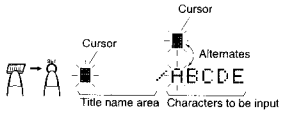
■ Since the procedure to give title is the same as for the disc title and track title except for step 4, both functions are explained together here.
■ Use the Unit to carry out these functions.

1. Insert an MD to be edited with its label side up.

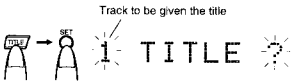
2. Press the MD▶/II button and then ■ button to set the function to MD.
The total track numbers and total playback time are displayed.

3. Press the TITLE button until "DISC TITLE ?/ TITLE ? (for track title)" is displayed.
Each time you press the button, the display changes as follows.
Current display→DISC TITLE→TITLE→(back to the beginning)

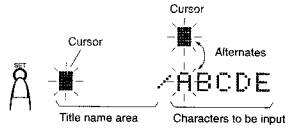
4. Press the SET button.
- For DISC TITLE:



- For TITLE (Track Title):



① Select the track number to be given the title by pressing the I◀◀ or ▶▶I button or turning the JOG dial.
② Press the SET button.



5. Input a preferred title (up to 32 characters).

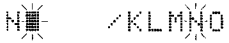
Use the following buttons to input a title.

[Title editing buttons and their functions] (see below)

Button	Function
DISPLAY /CHARA.	Changes the type of characters to be input as follows. Upper-case letters and symbols ← ↓ Lower-case letters and symbols ↓ Numbers
	Moves the cursor for the character to be input to the right. When you try to move the cursor over the characters on the display, five characters scroll at a time. (e.g. ABCDE → FGHIJ)
	Moves the cursor for the character to be input to the left. When you try to move the cursor over the characters on the display, five characters scroll at a time. (e.g. FGHIJ→ ABCDE)
▶▶|	Moves the cursor for the title name to the right.
|◀◀	Moves the cursor for the title name to the left.

Example: When input the title "N(space)1"

1. Display the letter N to be input by turning the JOG dial to the right or left.
2. Select "N" (put the cursor to the letter N by turning the JOG dial to the right or left).
3. Press the SET button.
   The letter N is now displayed in the title area.

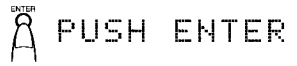


4. Select "(space)" and press the SET button.
5. Press the DISPLAY/CHARA. button until the numbers are displayed.
6. Select "1" and press the SET button.
   The title name "N(space)1" will be displayed.

Editing the Title Name:

- If the wrong character has been input, clear it using the CANCEL button.
- To clear a particular character which has been input, use the ▶▶| or |◀◀ button to align the cursor with the character, and press the CANCEL button. Then, select the correct character and press the SET button.

6. Press the ENTER button.



7. Press the ENTER button again.

8. Press the ≙MD button to complete editing.

The MD is ejected after "UTOCwriting" is displayed.

- You can also complete editing operation by pressing the ⏻/| button to turn off the power.

To cancel the operation, press the CANCEL button in step 6.

Note: While "UTOCwriting" is displayed, do not disconnect the power cord or subject the Unit to the vibration to avoid incorrect recording.

Giving a Track Title during Playback

You can give a track title during playback a track.

1. Press the TITLE button.

"TITLE ?" appears on the display.

2. Press the SET button.

3. Perform steps 5 - 8 mentioned above to give a track title.

Note: Give a title before playback of the track is ended.

[Character Layout Table]

You can write album or song names to a disc, using the following characters:

Uppercase letters

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z				
(space)	!	"	#	$
%	&	'	(	)
*	+	,	−	.
/	:	;	<	=
>	?	@	_	`

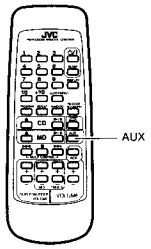
Lowercase letters

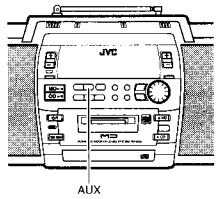
a	b	c	d	e
f	g	h	i	j
k	l	m	n	o
p	q	r	s	t
u	v	w	x	y
z				
(space)	!	"	#	$
%	&	'	(	)
*	+	,	−	.
/	:	;	<	=
>	?	@	_	`

Numbers

0	1	2	3	4
5	6	7	8	9

Listening to an Auxiliary Equipment





Listening to External Equipment

You can listen to an auxiliary equipment.

■ First make sure that the auxiliary equipment is properly connected to the System.(See page 4).

1. Set the volume level to minimum.

2. Press the AUX button.

"AUX" appears on the display.

■ To listen to the auxiliary equipment, start playing the auxiliary equipment.

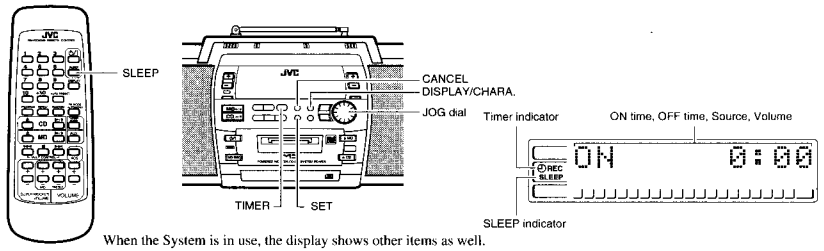
3. Adjust the volume to the desired listening level.

4. Apply sound effects, if you wish.

■ Adjust the super woofer volume to reinforce the bass sound.
■ Press the ACS (ACTIVE CLEAR SOUND) button to activate the ACS effect. (See "ACS (Active Clear Sound) Effect" on page 6.)
■ Press the MID/TREBLE button to control the tone. (See "Tone Control (MID/TREBLE)" on page 5.)

Note: For operation of the auxiliary equipment, refer to its Instructions.

Using the Timers



When the System is in use, the display shows other items as well.
For simplicity, we show here only the items described in this section.

The timers let you control listening and recording functions automatically.

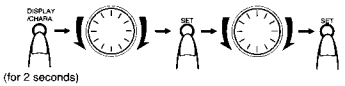
Setting the Clock

- When you plug the AC power cord into the wall outlet, the time indication blinks on the display.

You can set the clock whether the System is on or off.
Use the Unit to set the clock.

Notes:

- The clock must be correctly set for the timers to work.
- The procedure must be completed within two minutes. Otherwise, the setting is cleared and must be repeated from the beginning.



(for 2 seconds)

1. Press the DISPLAY/CHARA. button on the Unit for more than two seconds.
The hour indication rapidly blinks on the display.

2. Turn the JOG dial to set the hour.
Turn the JOG dial to the right or left to increase or decrease the hour. Turning it rapidly advances or decreases the hour faster.

3. Press the SET button.
The minute indication rapidly blinks on the display.

4. Turn the JOG dial to set the minute.
Turn the JOG dial to the right or left to increase or decrease the minute. Turning it rapidly advances or decreases the minute faster.

5. Press the SET button.
The selected time is set and the seconds start counting from 0.

CAUTION: If there is a power failure, the clock loses its setting after about 5 minutes. "0:00" blinks on the display and the clock must be reset.

Setting the Daily Timer

Once you have set the Daily Timer, the timer will be activated at the same time every day. It can be cancelled and reactivate whenever you wish.
The Timer indicator on the display shows when the Daily Timer you have set is in effect.
Use the Unit to set the Daily Timer.

Note: Perform each setting within 30 seconds. Otherwise, setting is cleared and the procedure must be repeated from the beginning.

1. Press the ⏻/| button to turn on the System.

2. Setting the ON time (Example: 12:15).

1. Press the TIMER button.
   The Timer indicator lights up and the hour of the current ON time blinks on the display.

   ⏲ ON 0:00

2. Turn the JOG dial to set the hour you want the Unit to come on.
   Turn the JOG dial to the right or left to increase or decrease the hour. Turning it rapidly advances or decreases the hour faster.

   ⏲ ON 12:00

3. Press the SET button.
   The minute of the current ON time blinks on the display.

   ⏲ ON 12:00

4. Turn the JOG dial to set the minute.

   ⏲ ON 12:15

5. Press the SET button.
   The hour of the current OFF time blinks on the display.

   ⏲ OFF 0:00

3. Setting the OFF time (Example: 13:15).

1. Turn the JOG dial to set the hour you want the Unit to be turned off.

   ⏲ OFF 13:00

2. Press the SET button.
   The minute of the current OFF time blinks on the display.

   ⏲ OFF 13:00

3. Turn the JOG dial to set the minute.

   ⏲ OFF 13:15

4. Press the SET button.
   The music source "TUNER" blinks on the display.

4. Selecting the music source.

1. Turn the JOG dial to select the music source you want to listen to. The display changes as shown below.
   TUNER→TUNER REC→CD→MD→(back to the beginning)
   - When you select the "TUNER REC", the "REC" indicator appears on the display.
2. Press the SET button.
   The current volume setting blinks on the display.

5. Setting the volume level.

1. Turn the JOG dial to select the volume level.
   -- : The current volume level will be used.
   0 to 50: When the timer is turned on, the Volume will be automatically set to the selected level.

   ⏲ VOLUME 15

2. Press the SET button.
   The timer setting is completed and the display returns to the display before you set the timer. The Timer indicator remains lit.

6. Before turning off the System, prepare the music source selected in step 4.
TUNER: Tune in to the desired station.
TUNER REC: Tune in to the desired station and insert an MD for recording the station.
CD: Insert a CD.
MD: Insert an MD.

7. Press the ⏻/| button to turn off the System.

To cancel the operation, press the CANCEL button in steps 2 - 4 and 5-1. Each time you press the CANCEL button, the display returns to the previous step one.
To cancel the timer, press the TIMER button. The Timer indicator goes out on the display.
To reactivate the cancelled timer, press the TIMER button to light the Timer indicator. Then, press the SET button until the display returns to the original display.
To confirm the timer settings, press the TIMER button twice to cancel and reactivate the timer. Then, press the SET button repeatedly to see the current timer settings (ON time, OFF time, source, and volume).

To change the timer setting, repeat the setting procedure from the beginning.

- When the timer turns on, the Timer indicator starts blinking and the volume level gradually increases from 0 (zero) to the preset level, except when you set the volume level to "--" in step 5.

CAUTION: If the System is unplugged, or a power failure occurs, the timer setting will be lost. You will need to reset the clock first, then the timer.

Setting the SLEEP Timer

Use the Sleep Timer to turn the System off after a certain number of minutes when it is playing. By setting the Sleep Timer, you can fall asleep to music and know that your System will turn off by itself rather than play all night.

■ You can only set the Sleep Timer when the System is on and a source is playing.

1. Play a CD, MD, or tune in to the desired station.

2. Press the SLEEP button on the Remote Control.
"SLEEP" appears on the display. SLEEP 30

3. Set the length of time you want the source to play before shutting off.

- Each time you press the SLEEP button, it changes the number of minutes shown on the display in this sequence:
  → 30 → 60 → 90 → 120 → Cancelled (Original display)→ (back to the beginning)

After setting the number of minutes for the Sleep Timer, the display will stop blinking and return to the display as before setting the Sleep Timer. **(The display is dimmed.)**
The System is now set to turn off after the number of minutes you set.

To Confirm the Sleep Time
When the SLEEP button is pressed, the remaining sleep time is displayed. Wait until the display returns to the original display.

To Cancel the SLEEP Timer Setting
Press the SLEEP button until the original display appears on the display. Turning off the System also cancels the SLEEP Timer.

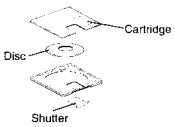
■ If you are setting the Daily Timer, the System will be turned on at the set time to wake you up.

Information on MDs (Minidiscs)

This is a new digital audio disc format: it has a diameter of 64 mm and enables up to 74 minutes of playback and recording.

The cartridge

The diameter of the disc itself is 64 mm, smaller than a CD single. The disc sits inside a 68 × 72 mm cartridge, which also being pocket size, makes minidiscs extremely handy for carrying and storage. Since the disc is protected by the cartridge, dust and dirt cannot easily get into it. And thanks to a shutter which is closed at all times except during use, there is no need to worry about scratches or finger marks, making the handling of minidiscs very simple.



Two types of minidisc

There are two types of minidisc, "recordable MDs" and "playback-only MDs." The playback method for each is the same: a laser irradiates the disc and the signal is read from the beam which comes back. However, the recording method for each type is different.

Playback-only MD

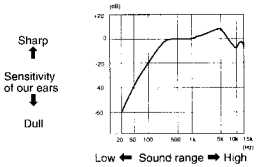
This is the type used for commercially-available pre-recorded MDs, on which recording cannot be done. Like a CD, data is recorded based on the presence or absence of small indentations called pits. A disc recorded with this format is called an "optical disc."

Recordable MDs

These are the so-called "blank" MDs you can use to make your own recordings. Data is recorded by magnetism, which is easily processed, so that recording can be done again and again. By using a laser to heat the disc, the magnetism is erased and the magnetic head records the new data. Discs with this type of recording method are called magneto-optical (MO) discs.

ATRAC (Adaptive Transform Acoustic Coding)

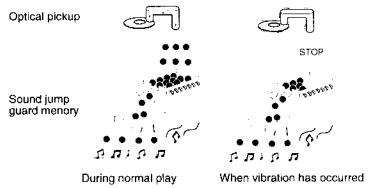
Within recordings, there are sounds which cannot be readily heard. For example, as the volume decreases, high-pitched sounds and low-pitched sounds become difficult to hear. also, if a quiet sound comes at the same time as or just after a loud sound, it will not be heard. With minidiscs, data is compressed using a technology called ATRAC (Adaptive Transform Acoustic Coding) which selectively chooses sounds based on human sense of hearing characteristics. With this technology, the recorded data is about one-fifth the volume of the original data, allowing it to fit on a compact minidisc.



Sound range and sensitivity of our ears

Sound skip guard memory

With the minidisc, the data of the track being played can be temporarily stored up using a function called "sound skip guard memory". Even when data cannot be collected properly from the disc due to shaking or vibrations, information is stored in the "sound skip guard memory", so that there is no break in the sound which is actually delivered.



UTOC (User Table Of Contents)

In a minidisc, apart from the recorded tracks, there is the "UTOC". In this area, information such as the position where each track is recorded, the track divisions, and track order are listed. When music search is done, the UTOC is consulted, and the tracks are quickly found and played back. When editing is done, only the UTOC is changed, so there is no need to re-record the tracks.

MD Messages

Messsage	Meaning	Action
BLANK DISC	A disc has been inserted with nothing recorded on it.	Except when making a new recording, replace the disc with one which has been recorded on.

Messsage	Meaning	Action
CANNOT JOIN	You have tried to join tracks which cannot be joined.	This is a limitation of the minidisc system. See "Minidics limitations" on page 24.
DISC ERROR	There is a problem (damage) with the disc.	Replace the disc.
DISC FULL	There is not enough space left on the disc. There are over 254 tracks.	Replace the disc with another recordable MD.
DISC PROTECTED	The disc is in accidental erasure protection mode.	Slide the accidental erasure protection tab. (So that the hole is covered.)
EMERGENCY STOP	A malfunction occurred during recording.	Stop the disc by pressing the ■ button and redo the operation.
NO DISC	There is no disc in the unit.	Insert a disc into the unit.
NON AUDIO CANNOT COPY	You have tried to digitally dub a CD-ROM	Stop recording.
PLAYBACK MD	You have tried to record or edit on a playback-only disc.	Replace the disc with a recordable MD.
TRACK PROTECTED	The track is protected.	This unit cannot undo track protection. Undo the protection using the appliance that created it.

Minidisc limitations

The minidisc records information in an original format that differs from that of conventional cassette tapes or DATs. Since there are some limitations with this recording format, the following types of conditions may arise. These conditions arre not malfunctions.

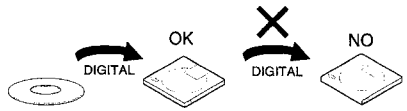
Condition	Cause
"DISC FULL" is displayed, even though the possible recording time is not used up.	With the minidisc, there is a maximum number of tracks which can be recorded, regardless of time. More than 254 tracks cannot be recorded on a disc.
"DISC FULL" is displayed, even though the number of tracks and recording time are not at the limit.	When parts of the disc are erased and re-recorded, blank spots are created on the disc. When recording to such a disc, one track of data is divided and recorded in the blank areas. During recording, when these divided parts become numerous, the "DISC FULL" message may be displayed. When a part of 8 seconds or less is created by division, that track cannot be joined by the JOIN function, and even if it is erased, the remaining usable time on the disc does not increase. Tracks divided into small pieces may skip when fast forward or fast rewind is done.
The JOIN function sometimes doesn't work.	
The remaining usable time on the disc doesn't increase even when tracks are erased.	
The sound skip during fast forward or fast rewind.	
The amount of recorded time on the disc added to the amount of remaining time falls shout of the disc's total possible recording time.	Minidiscs must have at least 2 seconds of continuous space in order to record. For this reason, the actual recording time of discs with a lot of short blank areas becomes shorter.

Rules of Digital Dubbing

The following rules regarding copyright exist for dubbing to MDs from CDs or DATs through digital terminals.

SCMS (Serial Copy Management System)

Minidiscs can record clear sound with low loss of quality from CDs or DATs through each component's digital input/output terminal. However, minidiscs are set up so that a disc recorded in this way cannot be recorded onto another minidisc through digital input/output terminals. In other words, you can not make a copy of a copy. This rule is called SCMS (Serial Copy Management System).
The recorder is designed in compliance with this rule. If you try to make a copy of a copy the error message "SCMS CANNOT COPY" is displayed, and dubbing can not be done.



It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.

Care And Maintenance

Handle your CDs and MDs carefully, and they will last a long time.

Compact Discs

- Only CDs bearing this mark can be used with this System. However, continued use of irregular shape CDs (heart-shape, octagonal, etc.) can damage the System.

- Remove the CD from its case by holding it at the edges while pressing the case's center hole lightly.
- Do not touch the shiny surface of the CD, or bend the CD.

- Put the CD back in its case after use to prevent warping.
- Be careful not to scratch the surface of the CD when placing it back in the case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.

- A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.

CAUTION: Do not use any solvent (for example, conventional record cleaner, spray thinner, benzine, etc.) to clean a CD.

MDs (Minidiscs)

- Do not open the shutter. Since the shutter is locked to prevent it from opening, forcing it to open will break the disc.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.

Moisture Condensation

Moisture may condense on the lens inside the System in the following cases:

- After turning on heating in the room.
- In a damp room.
- If the System is brought directly from a cold to a warm place.

Should this occur, the System may malfunction. In this case, leave the System turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

General Notes

In general, you will have the best performance by keeping your CDs and MDs.

- Store CDs and MDs in their cases, and keep them in cabinets or on shelves.
- Keep the system's CD tray closed when not in use.

Troubleshooting

- If you are having a problem with your System, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the System has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Possible Cause	Action
No sound is heard.	• Connections are incorrect, or loose.	• Check all connections and make corrections. (See pages 3 and 4.)
	• Headphones are connected.	• Disconnect the headphones.
Poor radio reception	• The antenna is disconnected.	• Reconnect the antenna securely.
	• The AM Loop Antenna is too close to the System.	• Change the position and direction of the AM Loop Antenna.
	• The FM telescopic antenna is not properly extended and positioned.	• Fully extend the FM telescopic antenna and turn it for the best reception.
The CD skips.	The CD is dirty or scratched.	Clean or replace the CD.
The CD does not play.	The CD is upside down.	Put the CD in with the label side up.
The MD cannot be inserted.	An MD has already been inserted.	Press the ▲MD button to eject the inserted MD and insert a new MD.
Recording cannot be made on MD.	The accidental erasure prevention knob of the MD is set to the open position.	Set it to the close position.
Timer fails to start.	Present time is not correct.	Set the time correctly.
Unable to operate the Remote Control.	• The path between the Remote Control and the sensor on the Unit is blocked.	• Remove the obstruction.
	• The batteries have lost their charge.	• Replace the batteries.
Operations are disabled.	The built-in microprocessor has malfunctioned due to external electrical interference.	Unplug the System then plug it back in.

Specifications

Amplifier

Output Power (Max.)
8.6 W (4.3 W + 4.3 W) at 4 ohms (full range)
26.4 W (13.2 W + 13.2 W) at 4 ohms, 60Hz (woofer)
(10% THD)
7 W (3.5 W + 3.5 W) at 4 ohms (full range)
21W (10.5 W + 10.5 W) at 4 ohms, 60Hz (woofer)

Input Sensitivity/Impedance (1 kHz)
AUX IN 500 mV/47 kohms
Output Sensitivity/Impedance (1 kHz)
Phones 16 ohms - 1 kohms
0 - 11 mW/ch output into 32 ohms

MD Player

Wow And Flutter Unmeasurable

CD Player

Wow And Flutter Unmeasurable

Tuner

FM Tuner
Tuning Range 87.5 - 108.0 MHz
AM Tuner
Tuning Range (MW) 522 - 1,629 kHz
(LW) 144 - 288 kHz
Antenna FM telescopic antenna
AM loop antenna

Speakers

Full range 7 cm × 2, 4 ohms
Super woofer 10 cm × 2, 4 ohms

General

Dimensions 636 × 221 × 296 mm (W/H/D)
Mass Approx. 10.2 kg

Accessories

Power Cord (1)
AM Loop Antenna (1)
Remote Control (1)
Batteries R6P (SUM-3)/AA (15F) (2)

Power Specifications

Power Requirements AC 230 V ~ , 50 Hz
Power Consumption 40 watts (power on mode)
7 watts (in Standby mode)

Design and specifications are subject to change without notice.
US and foreign patents licensed from Dolby Laboratories Licensing Corporation.

Disassembly Method

■Removing The Carrying Handle

(See Fig. 1)

Remove the two screws ① fixing the carrying handle and pull it out.

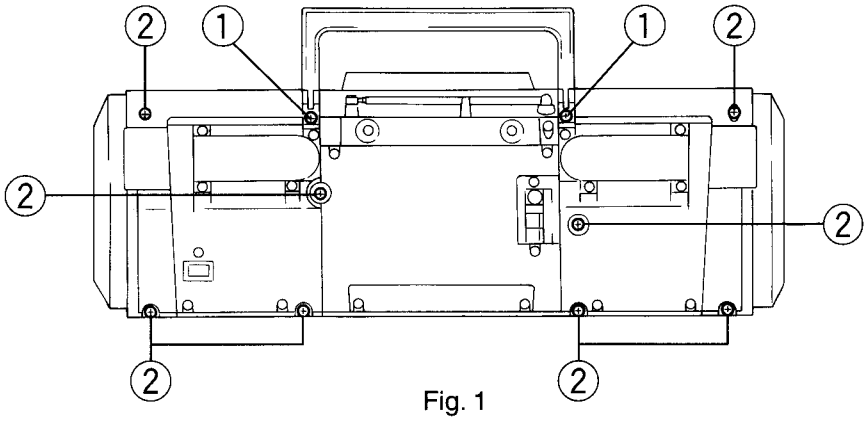


Fig. 1

■Removing The Front Cabinet

(See Figs. 1 - 3)

1. Remove the eight screws ② fixing the front cabinet from the rear side.

2. Remove the four screws ③ fixing each side speaker grille on the right and left.

3. Remove the two screws ④ fixing each side speaker on the right and left. (When removing a speaker, first remove the two screws ⑤ .

4. The front cabinet can be removed.

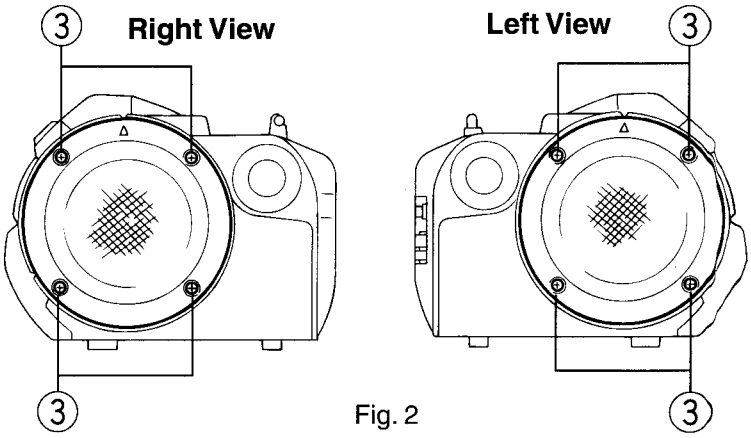


Fig. 2

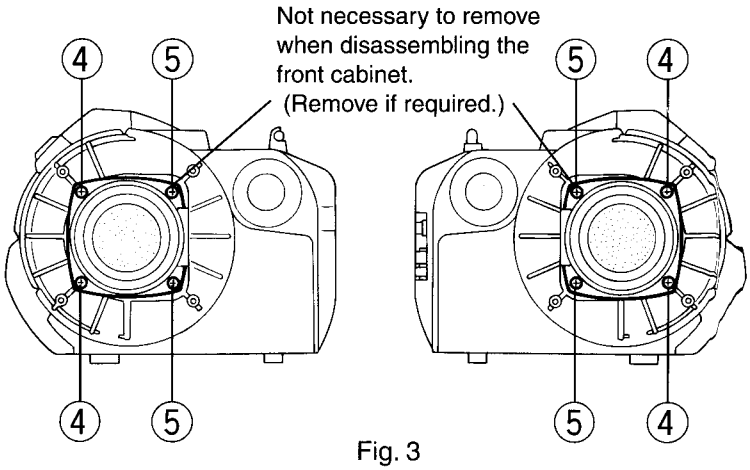


Fig. 3

■Removing The Left Rear Cover (Right Channel) (For Replacing The Fuse, etc.)

(See Fig. 4)

(Can be removed without removing the front cabinet first.)

1. Remove the seven screws ⑥ fixing the left rear cover.
2. The left rear cover can be removed.

■Removing The Right Rear Cover (Left Channel)

(See Fig. 4)

(Remove when servicing the power supply regulator PCB section.)

Remove the six screws ⑦ fixing the right rear cover.

■Removing The Center Cover (Tuner PCB Section/Power Amplifier PCB Section)

(See Fig. 4)

Remove the six screws ⑧ fixing the center cover.

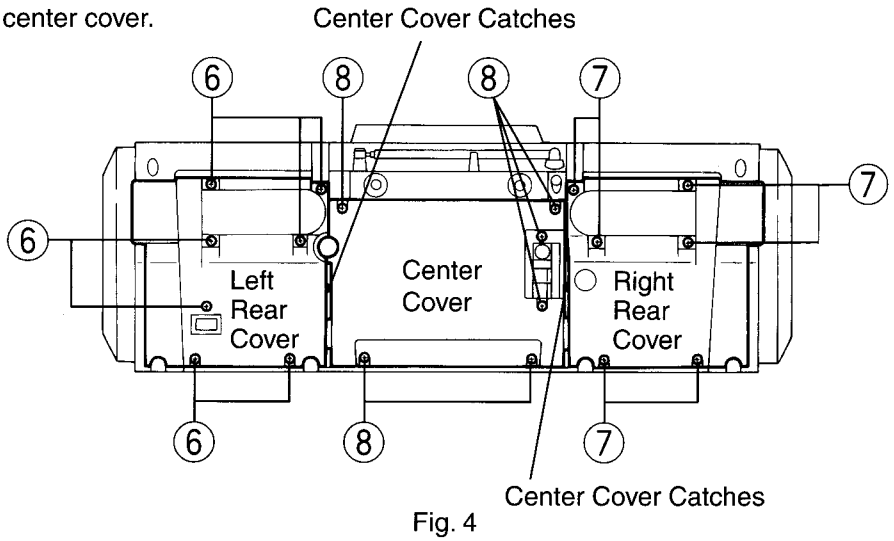


Fig. 4

■Removing The Power Amplifier PCB Assembly

(See Fig. 5)

1. Disconnect the wires from connectors CN302, CN303, CN304 and CN305 on the power supply PCB.
   Disconnect the flexible wire connecting the tuner PCB to connector CN301.
2. Disconnect connector CN404 on the tuner PCB.
3. Remove the four screws ⑨ fixing the power amplifier PCB assembly.

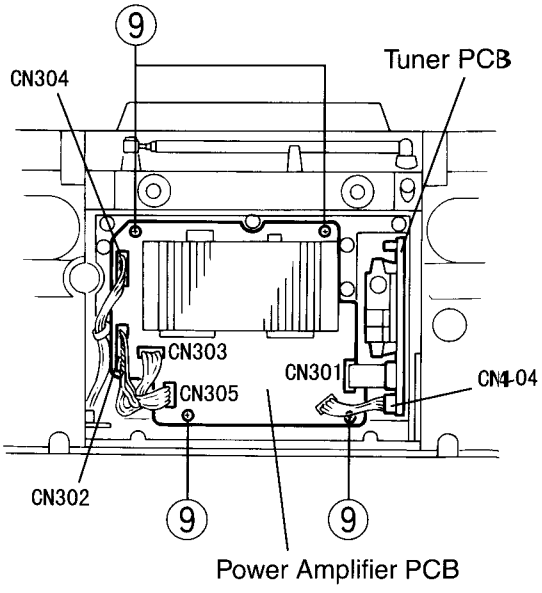


Fig. 5

■ Removing The Center Unit (MD/CD Unit) (See Figs. 6 - 8)

1. Remove the front cabinet.
2. Disconnect connector CN802 from the display PCB assembly.
3. Disconnect connectors CN906 and CN907 from the power amplifier PCB assembly.
4. Disconnect connector CN902 from the power supply regulator PCB.
5. Remove the rear center cover and disconnect the wires connecting the tuner PCB from connectors CN5, CN403 and CN404.

   (1) When the power amplifier PCB is removed, locate the square holes on either side of the center pole. While pressing the catches in the square holes, pull out the center unit.

   (2) With the power amplifier cover removed, push in the bottom of the tuner PCB then pull out the center unit.

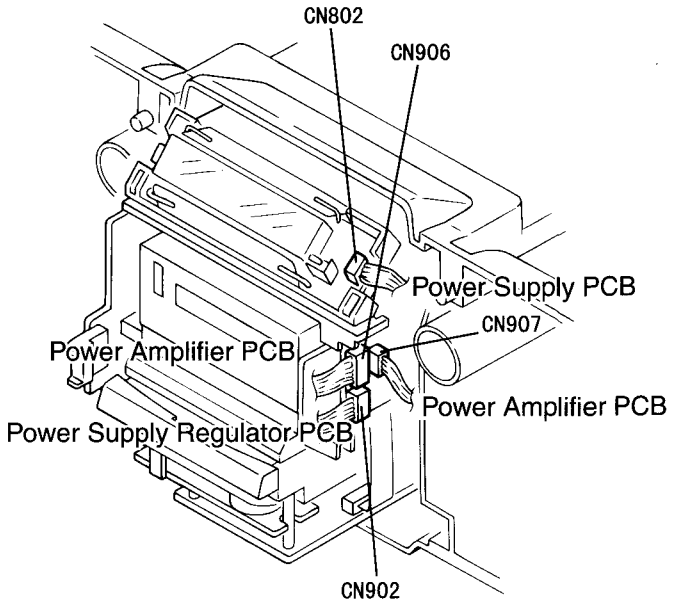


Fig. 6

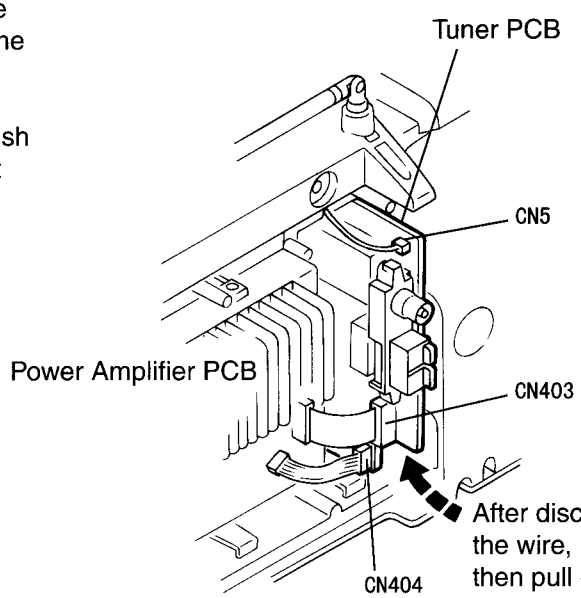
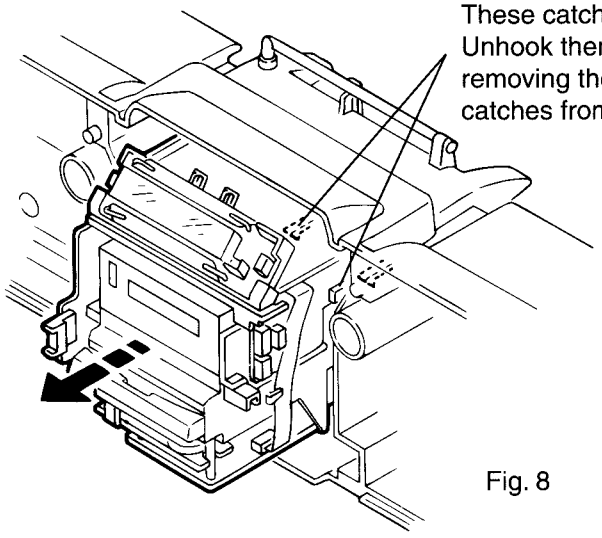


Fig. 7



These catches secure the center unit temporarily. Unhook them to pull out the center unit. (After removing the power amplifier PCB unit, release the catches from the back then pull out the center unit.)

Fig. 8

<Disassembling The Center Unit>

■Disassembling The MD Section And The CD Section (See Figs. 9-10)

1. Remove the five screws⑪ fixing the tuner PCB.

2. Disconnect combination connectors CN401, CN402 and CN407 joining the tuner PCB and the main PCB.

3. Disconnect the MD and CD sections. Be sure to disconnect the parallel wire, etc. connecting the CD PCB and the main PCB. Release the two combination catches (A and B) on the chassis.

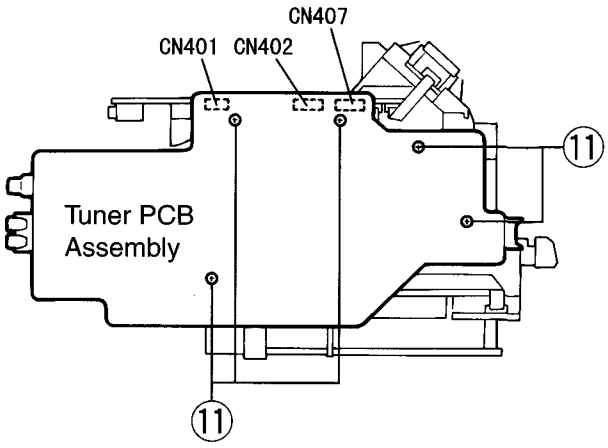


Fig. 9

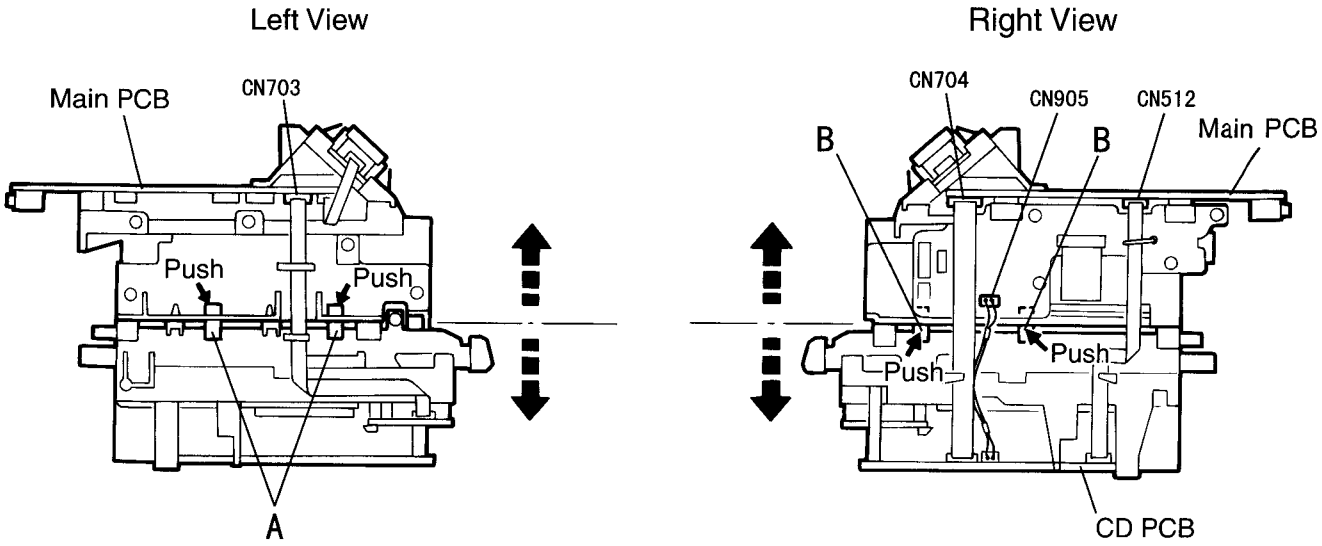


Fig. 10

<Disassembling The MD Unit>

■Removing The Display PCB Unit

(See Fig. 11)

1. Remove the four screws ⑫ fixing the display holder.

2. Disconnect connector CN801 on the left side of the display PCB.

■Removing The Main PCB Assembly

(See Fig. 11)

1. Remove the four screws ⑬ fixing the main PCB assembly. (Fix the PCB insulator following the PCB guide bosses.)

2. Pull down the main PCB assembly and disconnect connectors CN513 and CN514 on the side PCB.

■Removing The Side PCB Assembly

(See Fig. 12)

1. Disconnect and remove the ground terminal on the right side of the side PCB.

2. Disconnect connector CN901.

3. Remove the five screws ⑭ fixing the side PCB.

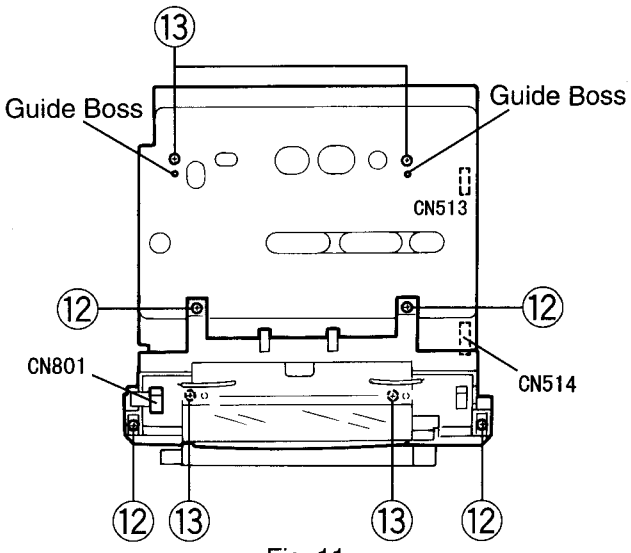


Fig. 11

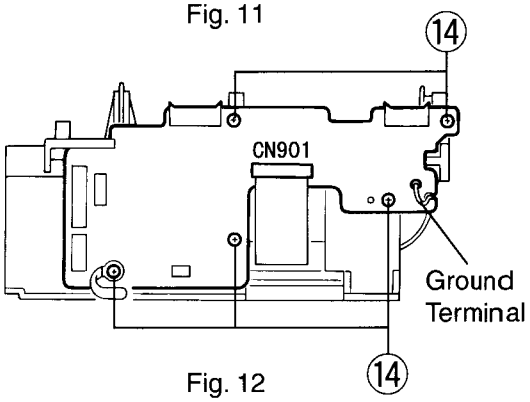


Fig. 12

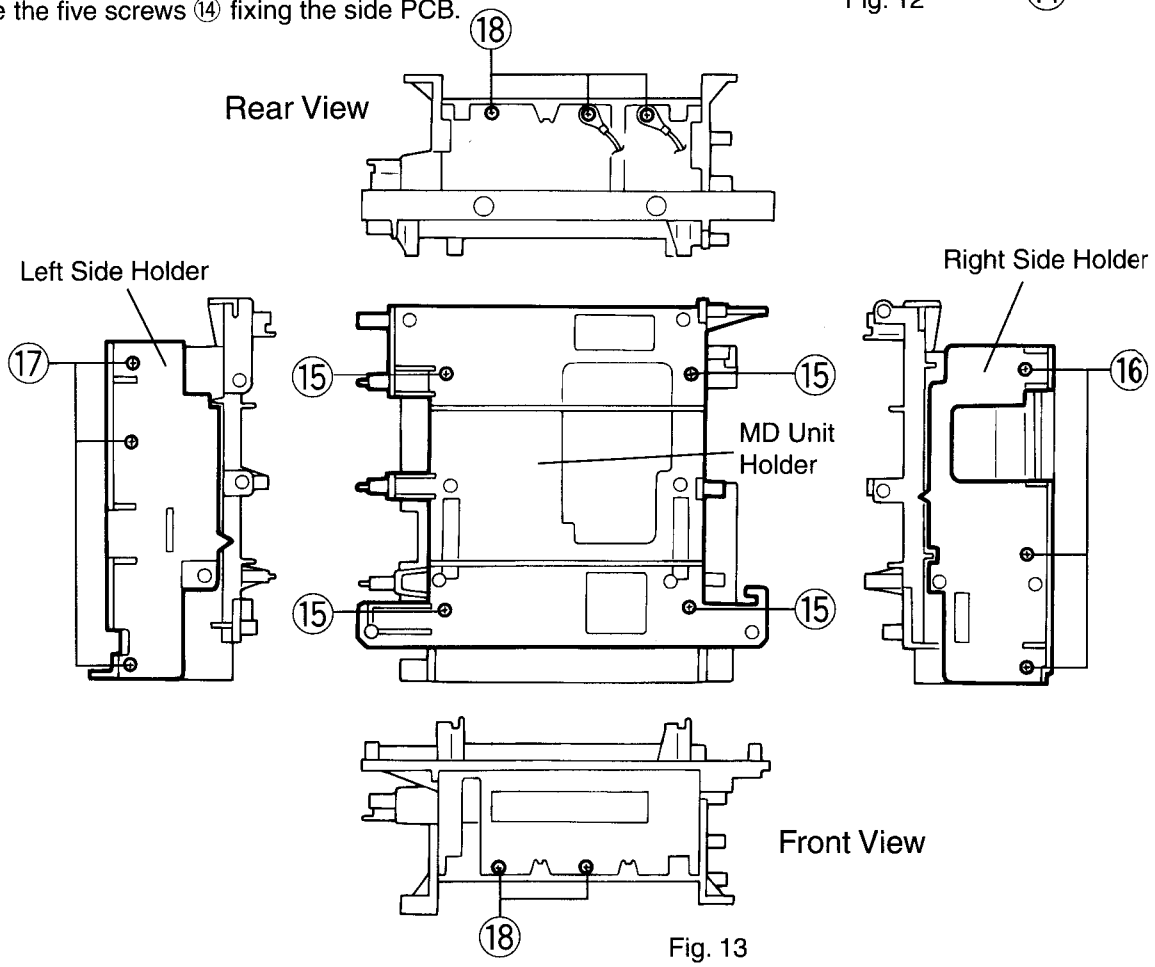


Fig. 13

■Removing The MD Unit (See Figs. 13-15)

1. Remove the four screws ⑮ fixing the MD unit holder. (See fig. 13)
2. Remove the three screws ⑯ fixing the right side holder. (See fig. 13)
3. Remove the three screws ⑰ fixing the left side holder. (See fig. 13)
4. Remove the two screws ⑱ fixing the front of the MD top case and the three screws ⑱ fixing the rear of the MD top case.

5. Remove the six screws ⑲ on the bottom case of the MD mechanism. Remove the mechanism unit. (When reassembling, make sure the dampers are between the damper blanket and mechanism chassis.)

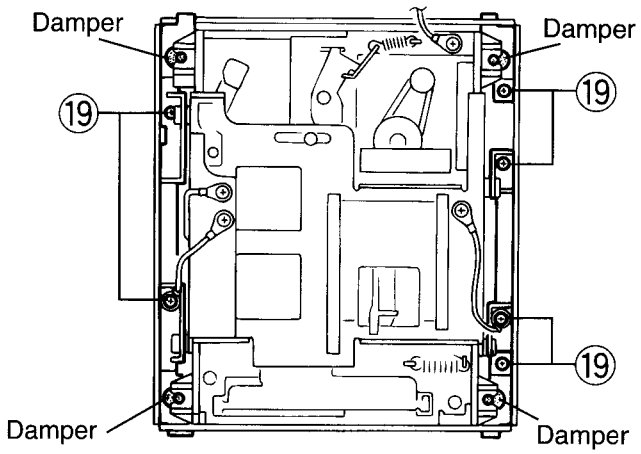
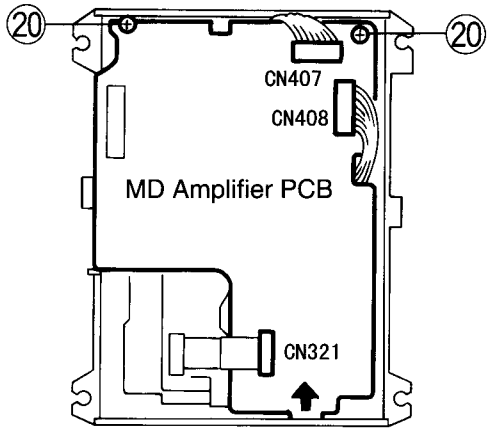


Fig. 14

6. Remove the two screws ⑳ fixing the MD amplifier PCB. Disconnect the wire if required.



Move the PCB in the direction of the arrow and remove it.

Fig. 15

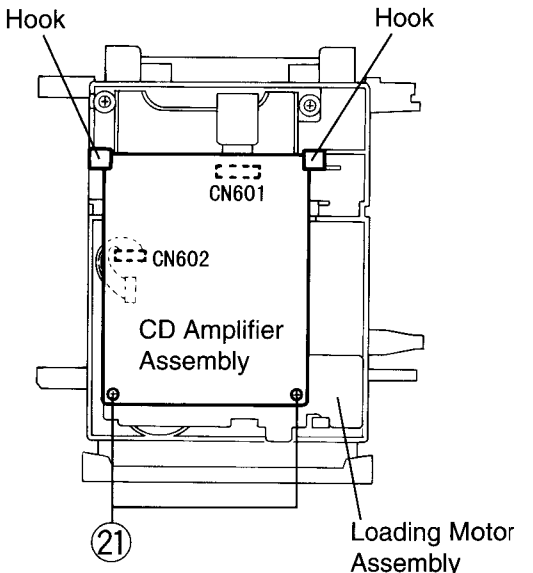


Fig. 16

<Disassembling The CD Unit>

■Removing The Amplifier PCB

(See Fig. 16)

1. Remove the two screws ㉑ fixing the CD amplifier PCB assembly.

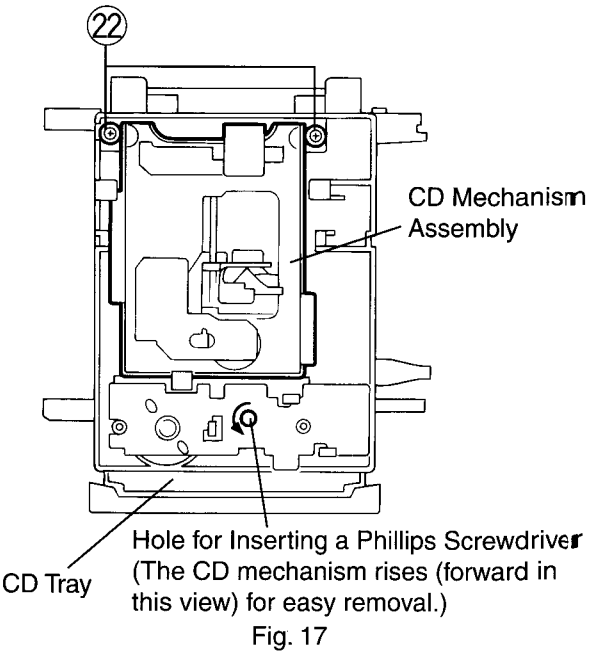
2. Remove the pickup and disconnect the motor wire if required.

■Removing The CD Mechanism

(See Fig. 17)

1. Remove the two screws ㉒ fixing the CD mechanism assembly.

2. Insert a Phillips screwdriver into the hole in the loading motor PCB and gently turn it to the left so that the CD mechanism rises. Turn it to the left a little more until the CD tray ejects. When the mechanism has entirely risen, remove the CD mechanism assembly.


㉒
CD Mechanism Assembly
CD Tray
Hole for Inserting a Phillips Screwdriver (The CD mechanism rises (forward in this view) for easy removal.)
Fig. 17

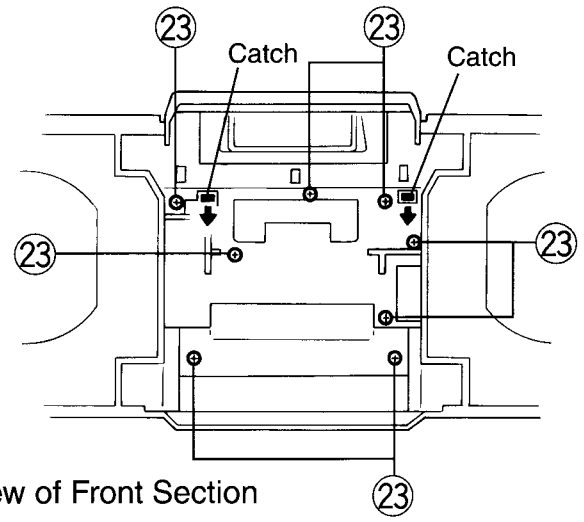
<Disassembling The Front Section>

■ Removing The MD Front Plate

(See Figs. 18-19)

1. Remove the eight screwsx ㉓ fixing the front plate.

2. Unhook the two catches on the inside of the front panel and remove the front plate.



Rear View of Front Section

Fig. 18

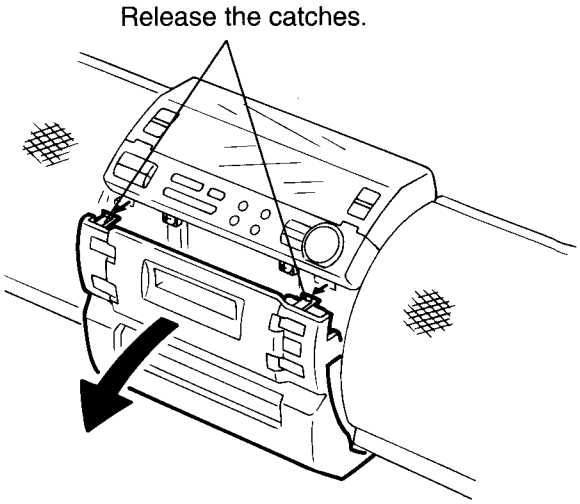


Fig. 19

■Removing the MD Mechanism Assembly

(Refer to Fig. 2-21.)

1. Remove the two screws ⑧ retaining the left side bracket from the left side of the MD mechanism.
2. Remove the four screws ⑧ retaining the right side bracket, side bracket A and side bracket B from the right side of the MD mechanism.
3. Remove the four dampers mounted on the four corners of the MD mechanism.
4. Remove each side bracket by sliding it in the direction of the arrow.

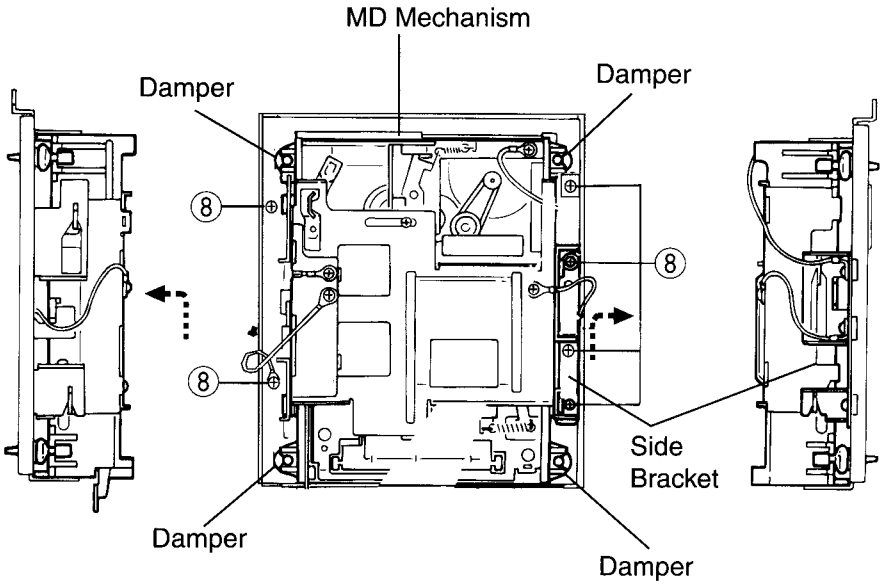


Fig. 2-21

■Removing the MD Servo PC Board

(Refer to Fig. 2-22.)

1. Remove the MD mechanism assembly.
2. Disconnect the wires from connectors CN407 and CN408 on the MD servo PC board on the back of the MD mechanism assembly.
3. Remove the two screws ⑨ from the back of the MD mechanism assembly.
4. Remove section ⓐ from the holder on the front side of the MD servo PC board by pulling it up toward the rear, so that the MD servo PC board can be removed upward.
5. Before disconnecting the flexible wire from connector CN321 on the MD PC board, solder the pickup assembly as shown in Fig. 2-22a.
   (Note: If it has not been soldered when the flexible wire is removed, the MD mechanism assembly may be damaged.)
6. Remove the flexible wire from connector CN521 on the MD servo PC board. (Refer to the disconnecting method shown in Fig. 2-22b.)

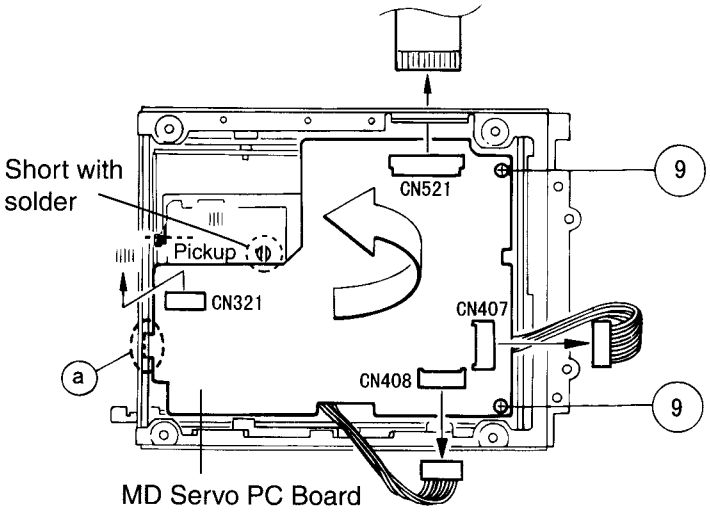


Fig. 2-22

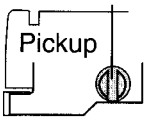


Fig. 2-22a

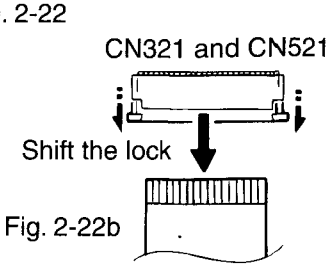


Fig. 2-22b

■ Removing the MD Traverse Mechanism

(Refer to Figs. 2-23 to 2-25.)

1. Remove the MD mechanism assembly and remove the MD servo PC board.
2. Remove the screw ⑩ retaining the slide bracket and the screw ⑪ retaining the ground lug terminal.
3. Remove the two screws ⑫ retaining the MD traverse mechanism, and pull out the bracket.
4. Desolder the two wires from the magnetic head connected to the loading circuit PCB.

(Note) When removing the MD traverse mechanism, pay special attention not to damage the magnetic head by engaging it with other parts. Also, check that the pickup is located on the inside of the disc. If the pickup is located on the outside of the disc, it may be engaged with other parts.

5. Shift the slide bracket in the direction of the arrow to remove the MD traverse mechanism.

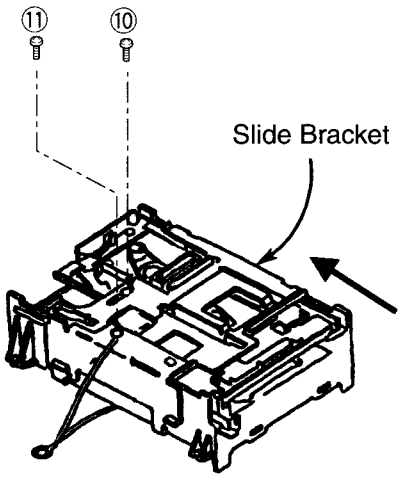


Fig. 2-23

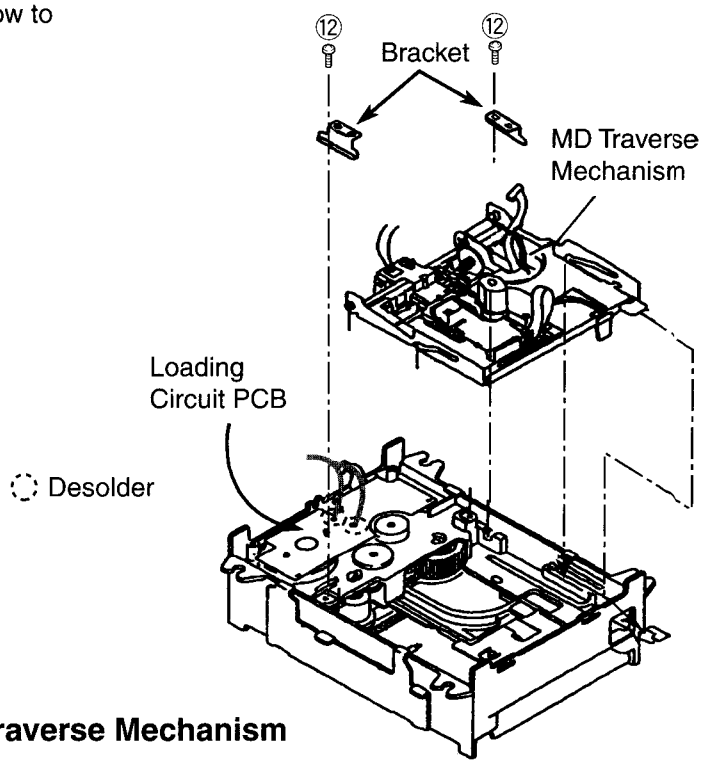


Fig. 2-24

■ Cautions on Reassembling the MD Traverse Mechanism

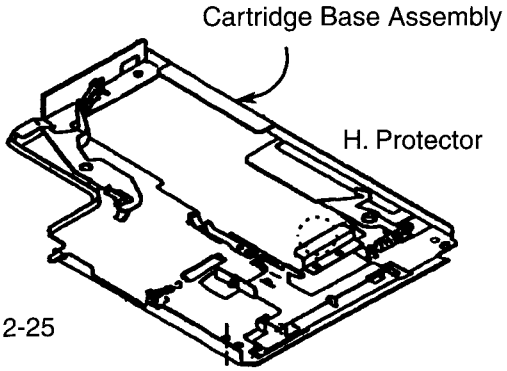
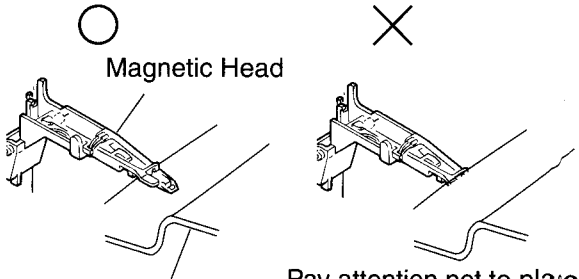


Fig. 2-25

Pay attention not to damage the magnetic head by engaging it with the H. Protector on the cartridge base assembly.



Pay attention not to place the H. protector on the magnetic head

■Removing the Magnetic Head Unit

(Refer to Figs. 2-26 to 2-27.)

1. Remove the MD traverse mechanism.
2. Remove the two screws ⑬ retaining the H. joint.
3. Pull out the magnetic head, paying attention not to let it come in contact with the pickup lens.
4. Pull out the H. shaft from the end on which the T. spring is not mounted.

(Note) When reassembling the H. shaft, insert the H. shaft while paying attention not to bend it, to avoid setting the magnetic head to the incorrect angle.

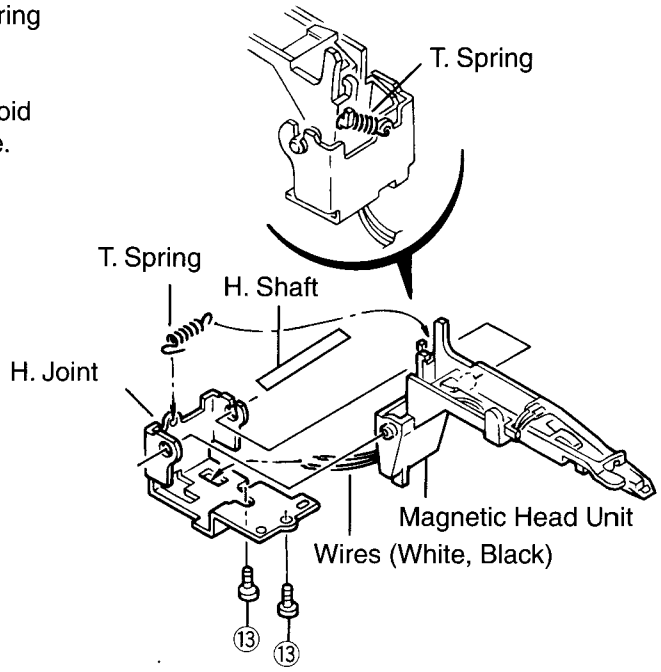


Fig. 2-26

■Removing the MD Pickup

(Refer to Figs. 2-26 to 2-28.)

1. Remove the MD traverse mechanism.
2. Remove the two screws ⑬ retaining the magnetic head unit. (Refer to Fig. 2-26.)
3. Release the catch and pull out the guide shaft in the direction of the arrow to remove the pickup together with the guide shaft.

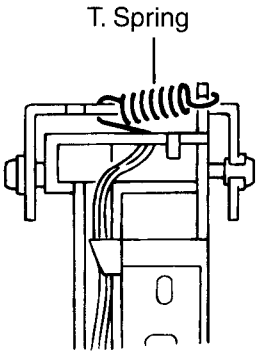


Fig. 2-27

■Reassembling the MD Pickup

(Refer to Fig. 2-28.)

1. Insert the section Ⓐ of the pickup into the guide to mount it onto the guide shaft.
2. Check that the guide shaft is securely held by the catch.

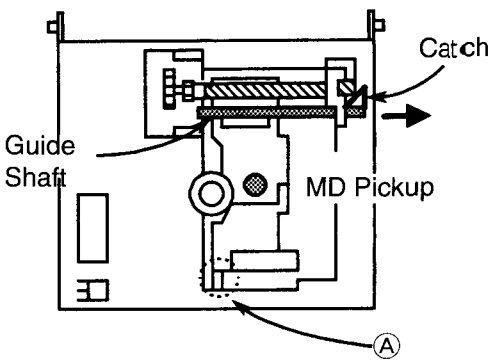


Fig. 2-28

■Removing the Feed Motor Assembly

(Refer to Fig. 2-29.)

1. Remove the MD traverse mechanism.
2. Turn over the MD traverse mechanism and desolder the two motor wires (white and black) connected to the PC board.
3. Remove the screw ⑭ retaining the motor bracket.
4. Release the catch Ⓑ from the chassis base, and remove the feed motor assembly.

■Removing the Spindle Motor Assembly

(Refer to Figs. 2-26 to 2-29.)

1. Remove the MD traverse mechanism.
2. Pull out the turntable assembly.
3. Turn over the MD traverse mechanism and desolder the two motor wires (red and black) connected to the PC board.
4. Remove the two screws ⑮ retaining the spindle motor assembly.

(Note) When replacing the spindle motor, also replace the turntable assembly. The turntable assembly cannot be re-used.

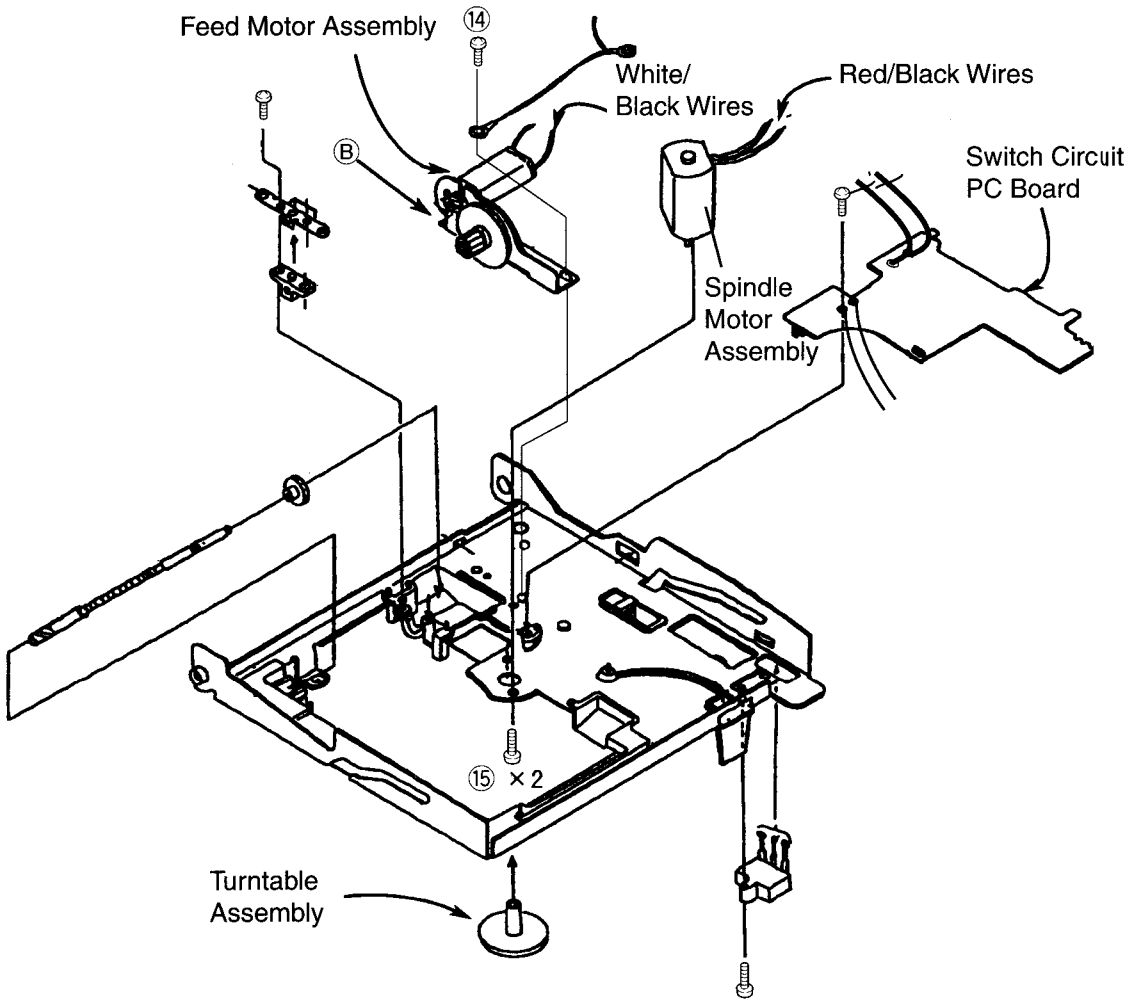


Fig. 2-29

■Removing the Slide Bracket

(Refer to Fig. 2-30.)

1. Remove the MD mechanism assembly.
2. Remove the two screws ⑯ retaining the slide bracket (L).
3. After removing the slide bracket (L), remove the slide bracket (R).

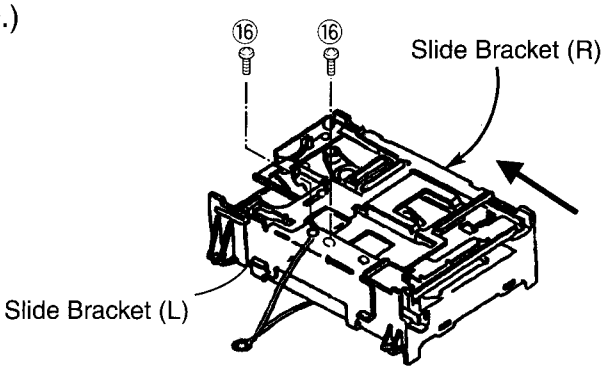


Fig. 2-30

■Removing the Carriage Base Assembly

(Refer to Figs. 2-31 to 2-33.)

1. Remove the MD mechanism assembly, then remove the MD servo PC board.
2. Remove the slide bracket (L) and slide bracket (R).
3. Remove the three screws ⑰ retaining the carriage base assembly to remove the carriage base assembly and the rack.

(Note) When reassembling the carriage base assembly and the rack, follow the mounting instructions shown in Figs. 2-32 and 2-33.

Installing the Rack

Mount by running the rack under the catch on the shutter lever as shown in the figure below.

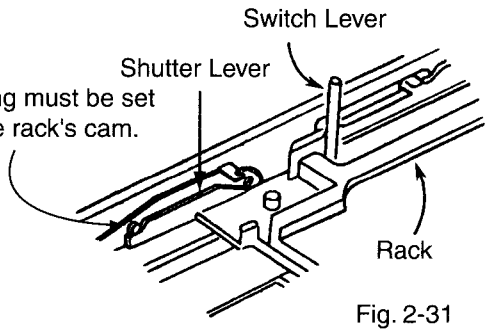


Fig. 2-31

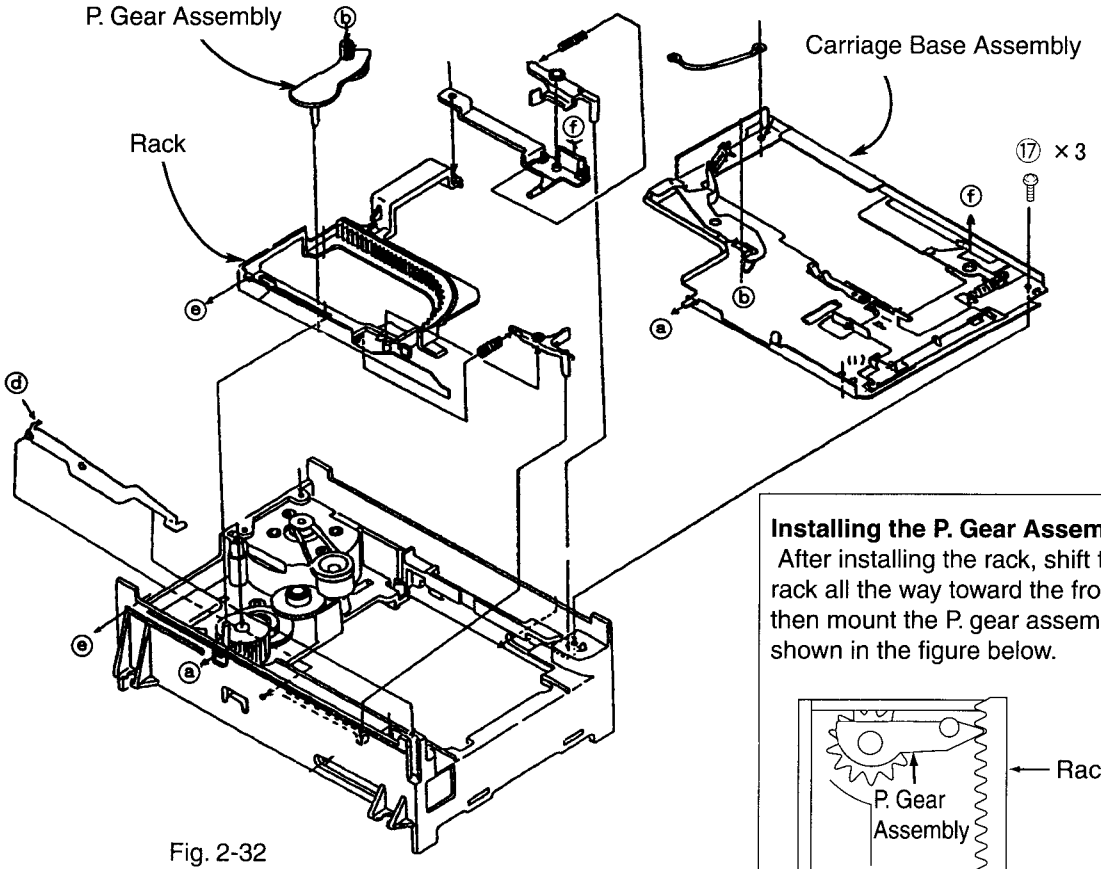


Fig. 2-32

Installing the P. Gear Assembly

After installing the rack, shift the rack all the way toward the front side, then mount the P. gear assembly as shown in the figure below.

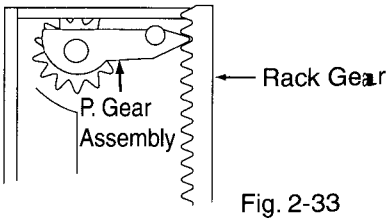
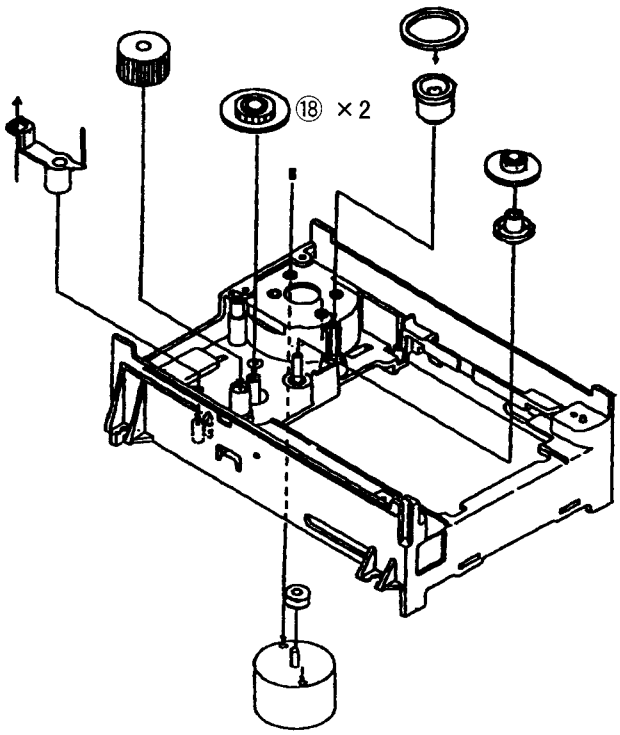


Fig. 2-33

■Removing the Loading Motor Assembly

(Refer to Fig. 2-34.)

1. Remove the carriage base assembly and the rack.
2. Remove the two screws ⑱ retaining the loading motor.
3. Remove the loading motor assembly by desoldering it from the loading circuit PC board.



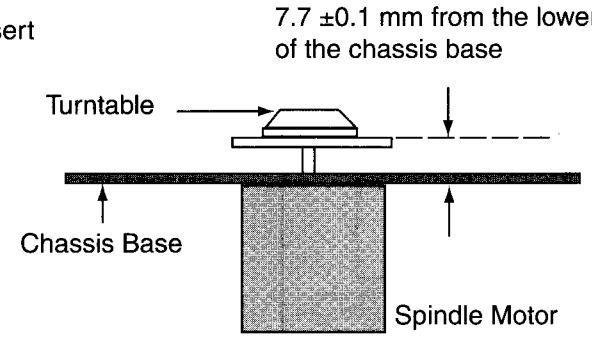
Loading Motor Assembly

Fig. 2-34

■Reassembling Parts to Each Motor

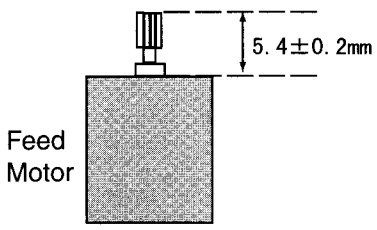
(Refer to Fig. 2-35 to 2-37.)

1. When mounting the turntable on the spindle motor, insert it so that the dimensions of each part become as shown in Fig. 2-35.
2. When mounting the gear on the feed motor, insert it so that the dimensions of each part become as shown in Fig. 2-36.
3. When mounting the pulley on the loading motor, insert it so that the dimensions of each part become as shown in Fig. 2-37.



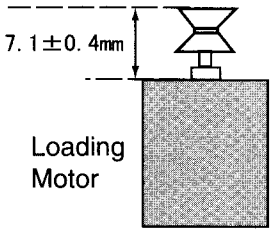
Inserting the Turntable into the Spindle Motor

Fig. 2-35



Inserting the Gear into the Feed Motor

Fig. 2-36



Inserting the Pulley into the Loading Motor

Fig. 2-37

Flow of Functional Operation Until TOC Read (CD)

Power ON → Play Key → Slider turns REST SW ON.

Check Point: Confirm that the voltage at the pin5 of CN602,or pin35 of IC701 is "H"➡"L"➡"H".

Slider turns REST SW ON. → Automatic tuning of TE offset

Automatic tuning of TE offset → Laser ON

Laser ON → Check that the voltage at the pin40 of IC603 is +5 V?

Laser ON → Detection of disc

Detection of disc → Automatic tuning of Focus offset

Automatic tuning of Focus offset → Automatic measurement of Focus S-curve amplitude

Automatic measurement of Focus S-curve amplitude → Confirm that the Focus error S-cuve siganl at the pin28 of IC603 is approx.2Vp-p

Automatic measurement of Focus S-curve amplitude → Disc is rotated

Disc is rotated → Confirm that the signal from pin24 IC603 is 0V as a accelerated pulse during approx.400ms.

Disc is rotated → Focus servo ON (Tracking servo ON)

Focus servo ON (Tracking servo ON) → Automatic measurement of Tracking error amplitude

Automatic measurement of Tracking error amplitude → Confirm the waveform of the Tracking error signal. at the pin 25 of IC601 (read of R609) (See fig-1)

Automatic measurement of Tracking error amplitude → Automatic tuning of Tracking error balance

Automatic tuning of Tracking error balance → Automatic tuning of Focus error balance

Automatic tuning of Focus error balance → Automatic tuning of Focus error gain

Automatic tuning of Focus error gain → Automatic tuning of Tracking error gain

Automatic tuning of Tracking error gain → TOC reading

TOC reading → Confirm the eys-pattern at the lead of TP602

TOC reading → Play a disc

■ Tracking error waveform at TOC reading

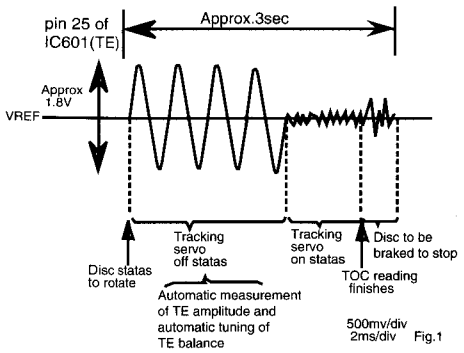


Fig.1

MD Section

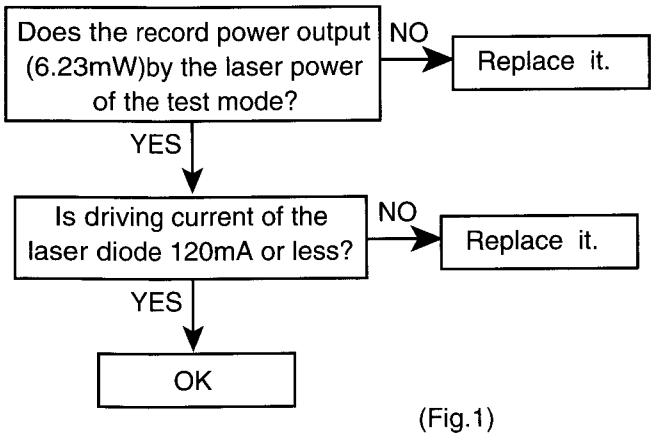
Maintenance of Laser Pickup

(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode (Fig.1)
When the life of the laser diode has expired, the following symptoms will appear.

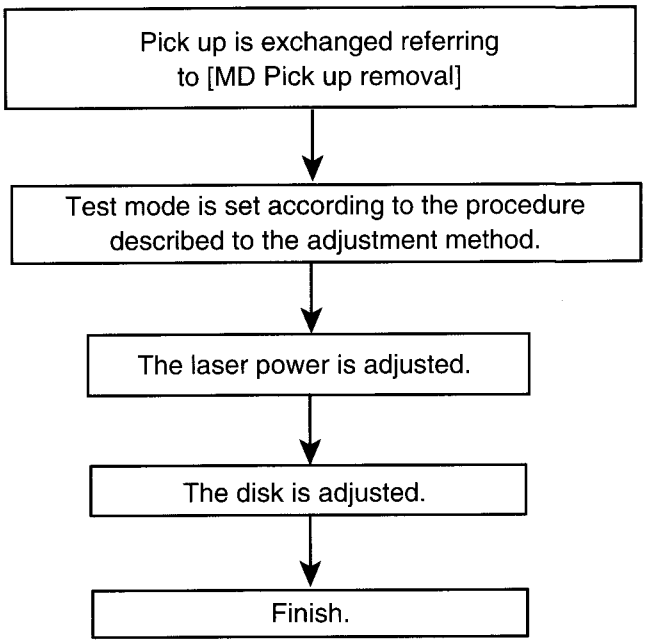
1. The level of RF output (EFM output:amplitude of eye pattern) will below.
2. It is not possible to record.
3. Driving current necessary to issue the laser diode increases.

Please confirm longevity according to the following flow chart.



(Fig.1)

Replacement of Laser Pickup


Pick up is exchanged referring to [MD Pick up removal]
Test mode is set according to the procedure described to the adjustment method.
The laser power is adjusted.
The disk is adjusted.
Finish.

Attention

Compare with previous CD players, over 10times laser beam is radiated from this model because of the magnetic recording.
Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.
The wound and note taintless on the disk used because the adjustment is automatically done by the disk confirmation after the laser power is adjusted, and a set value is written by all the recorded one.

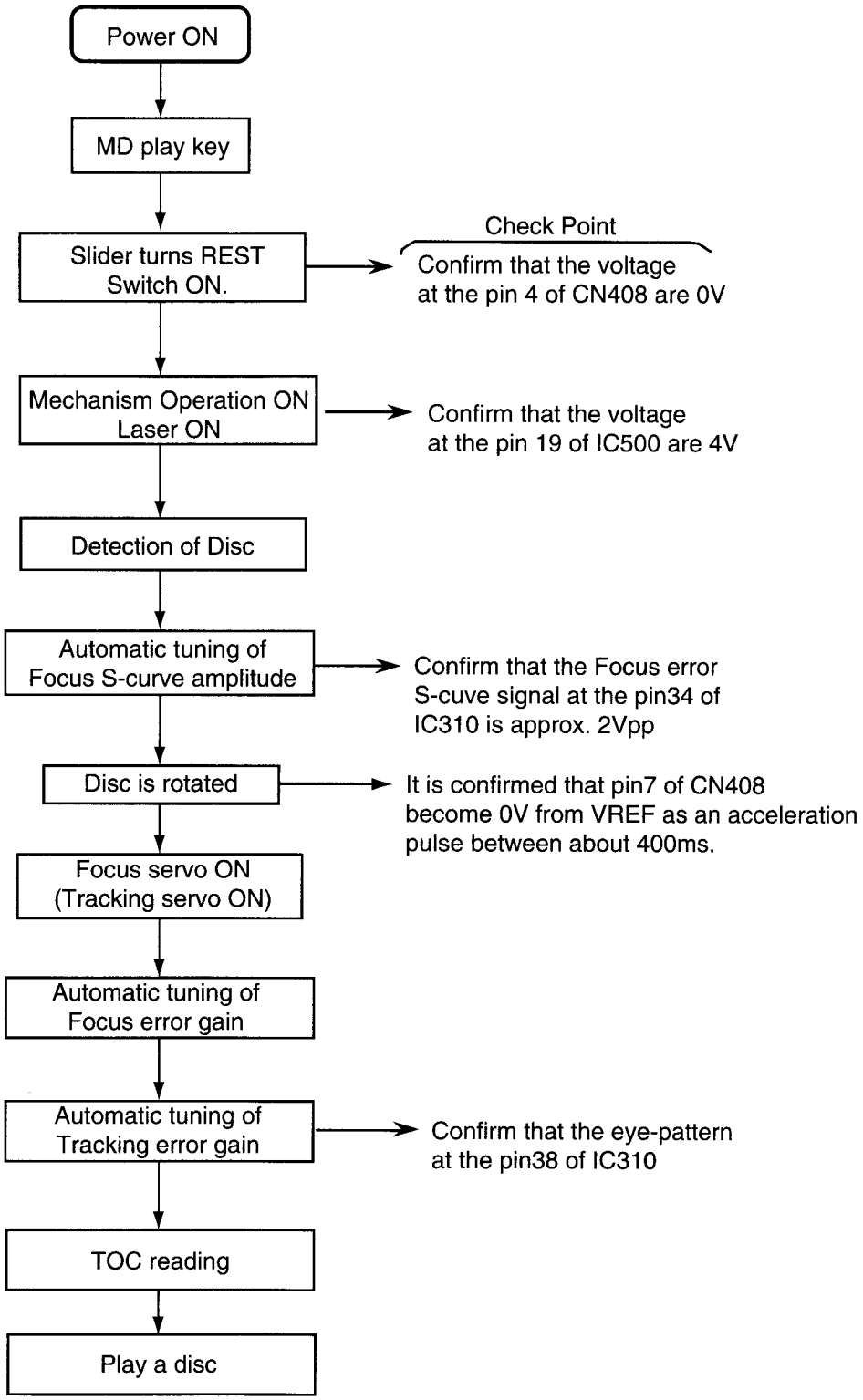
(3)Method of measuring driving current of laser diode

The voltage of R337 of the MD servo control substrate is measured, and it is judged that the longevity of the laser diode disappeared for 120mV or more.

(4) Semi-fixed resistor on the APC (Auto power control)P.C. board

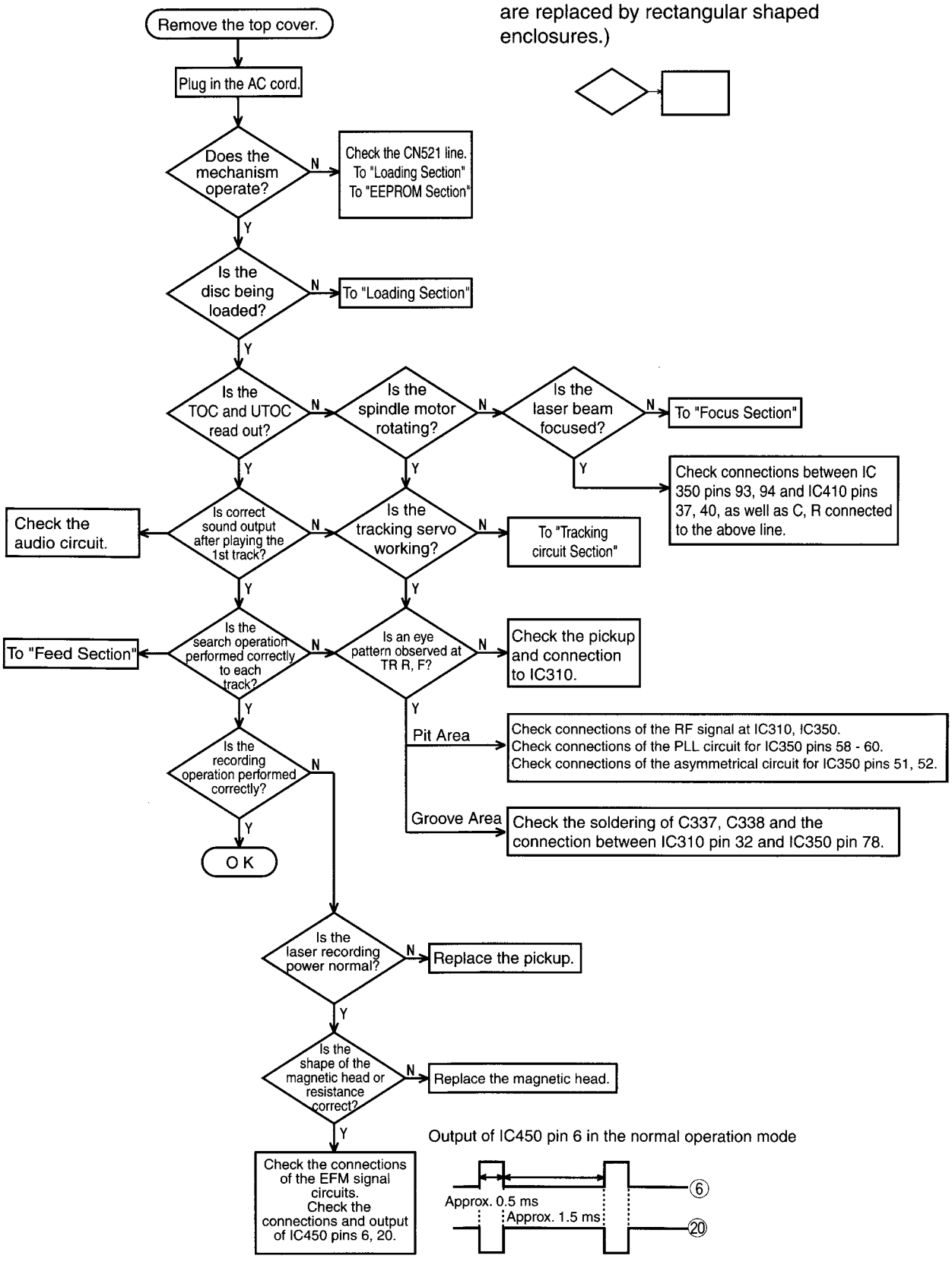
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value,the laser diode is almost worn out, and the laser pickup should be replaced.If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

Flow of Functional Operation Until TOC Read (MD)


Power ON
MD play key
Slider turns REST Switch ON.
Check Point
Confirm that the voltage at the pin 4 of CN408 are 0V
Mechanism Operation ON Laser ON
Confirm that the voltage at the pin 19 of IC500 are 4V
Detection of Disc
Automatic tuning of Focus S-curve amplitude
Confirm that the Focus error S-cuve signal at the pin34 of IC310 is approx. 2Vpp
Disc is rotated
It is confirmed that pin7 of CN408 become 0V from VREF as an acceleration pulse between about 400ms.
Focus servo ON (Tracking servo ON)
Automatic tuning of Focus error gain
Automatic tuning of Tracking error gain
Confirm that the eye-pattern at the pin38 of IC310
TOC reading
Play a disc

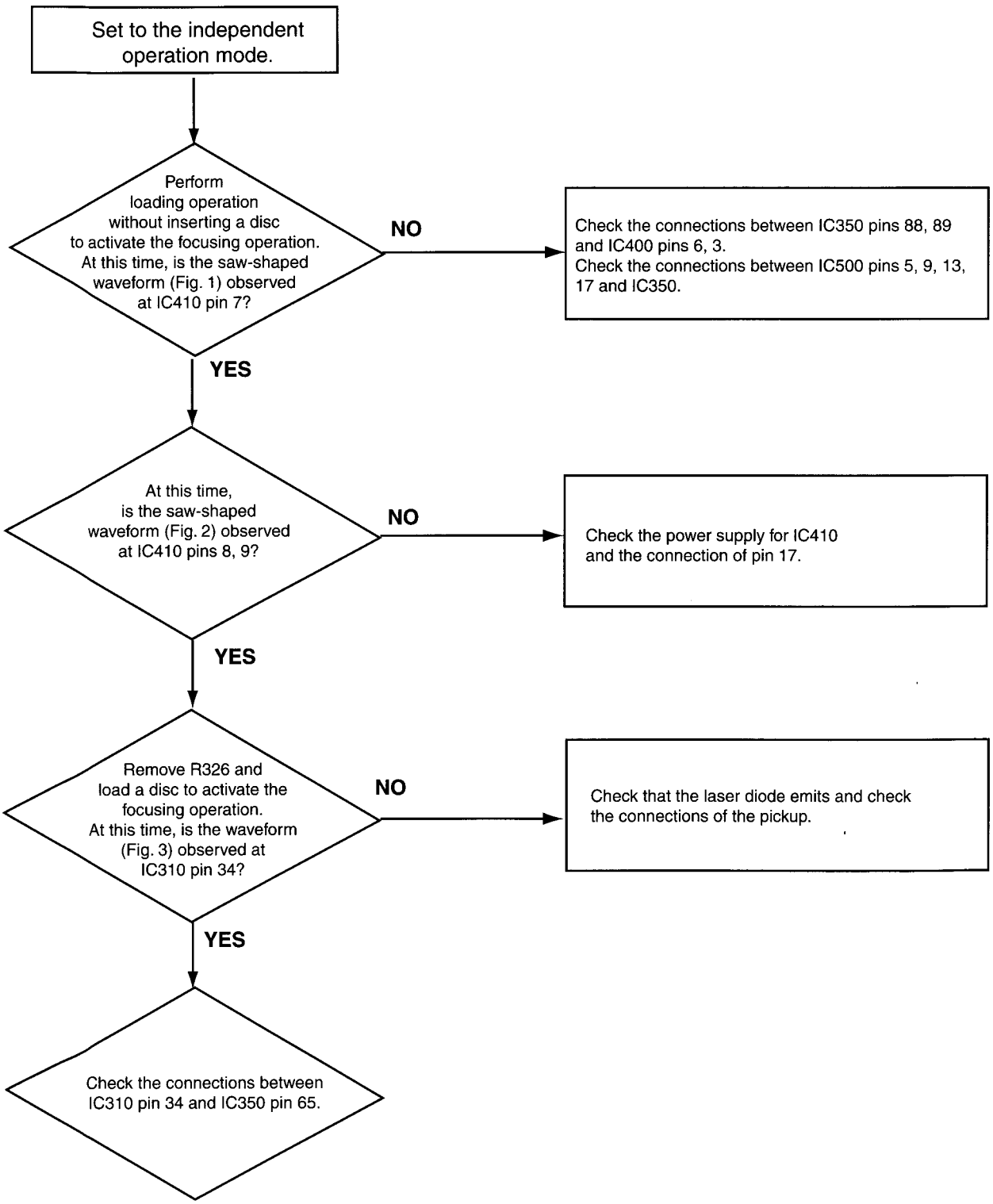
MD Section Repair Flowchart

(In the flowchart, diamond shaped enclosures are replaced by rectangular shaped enclosures.)


Remove the top cover.
Plug in the AC cord.
Does the mechanism operate?
N
Check the CN521 line.
To "Loading Section"
To "EEPROM Section"
Y
Is the disc being loaded?
N
To "Loading Section"
Y
Is the TOC and UTOC read out?
N
Is the spindle motor rotating?
N
Is the laser beam focused?
N
To "Focus Section"
Y
Y
Y
Check connections between IC 350 pins 93, 94 and IC410 pins 37, 40, as well as C, R connected to the above line.
Check the audio circuit.
Is correct sound output after playing the 1st track?
N
Is the tracking servo working?
N
To "Tracking circuit Section"
Y
Y
To "Feed Section"
Is the search operation performed correctly to each track?
N
Is an eye pattern observed at TR R, F?
N
Check the pickup and connection to IC310.
Y
Y
Pit Area
Check connections of the RF signal at IC310, IC350.
Check connections of the PLL circuit for IC350 pins 58 - 60.
Check connections of the asymmetrical circuit for IC350 pins 51, 52.
Is the recording operation performed correctly?
N
Groove Area
Check the soldering of C337, C338 and the connection between IC310 pin 32 and IC350 pin 78.
Y
O K
Is the laser recording power normal?
N
Replace the pickup.
Y
Is the shape of the magnetic head or resistance correct?
N
Replace the magnetic head.
Y
Output of IC450 pin 6 in the normal operation mode
Check the connections of the EFM signal circuits.
Check the connections and output of IC450 pins 6, 20.
Approx. 0.5 ms
Approx. 1.5 ms
⑥
⑳

■Focus Section

By grounding any one of pins 3 to 5 of CN410, loading operation is made possible without inserting a disc.

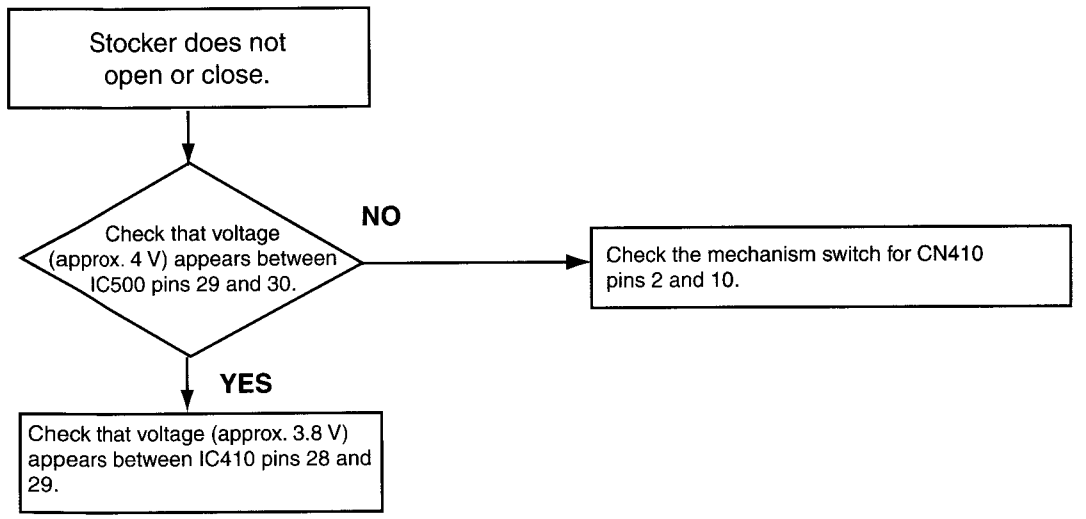

Set to the independent operation mode.
Perform loading operation without inserting a disc to activate the focusing operation. At this time, is the saw-shaped waveform (Fig. 1) observed at IC410 pin 7?
NO
Check the connections between IC350 pins 88, 89 and IC400 pins 6, 3.
Check the connections between IC500 pins 5, 9, 13, 17 and IC350.
YES
At this time, is the saw-shaped waveform (Fig. 2) observed at IC410 pins 8, 9?
NO
Check the power supply for IC410 and the connection of pin 17.
YES
Remove R326 and load a disc to activate the focusing operation. At this time, is the waveform (Fig. 3) observed at IC310 pin 34?
NO
Check that the laser diode emits and check the connections of the pickup.
YES
Check the connections between IC310 pin 34 and IC350 pin 65.

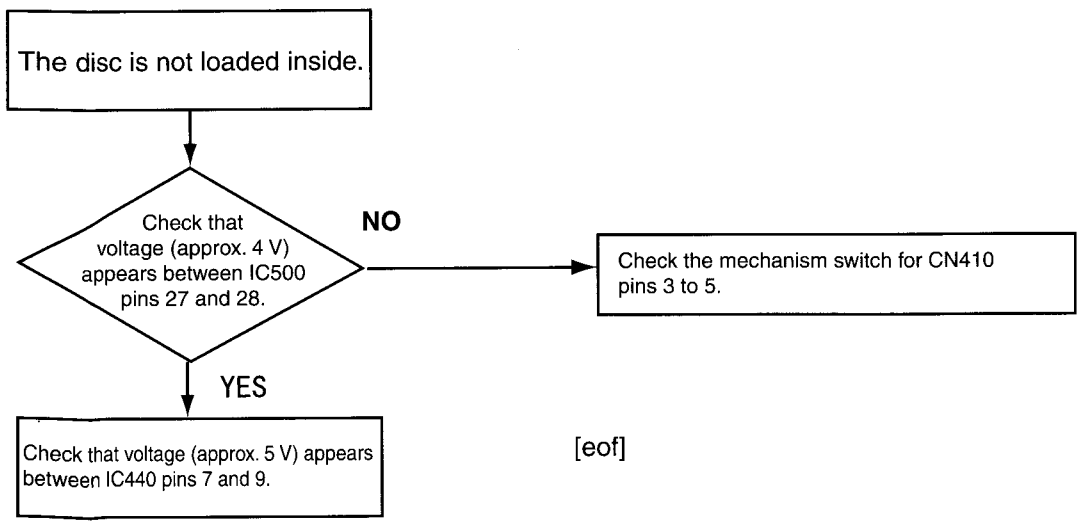
■EEPROM Section

After resetting is released, the MD microcomputer accesses the EEPROM (IC590) to read out the data in all the addresses. At this time, if the header is incorrect or the adjustment data contains invalid values (data is corrupted), the microcomputer continues communication with the EEPROM and does not perform any operation such as mechanism initialization. In this state, the communication line to the EEPROM (IC500 pins 70 to 72, 98) becomes blocked with signals. In this case, the EEPROM must be initialized.
If the EEPROM is replaced with a new one or data is corrupted, ground CN521 pins 18 - 21 and turn the AC power to the unit ON. When the mechanism performs the initialization operation, initialization of the EEPROM is completed.
Next, open CN521 pins 18 - 21 and turn the AC power to the unit ON again to perform adjustment.
If the above phenomenon remains even after EEPROM initialization is performed, the EEPROM may be electrically damaged.

■Loading Section

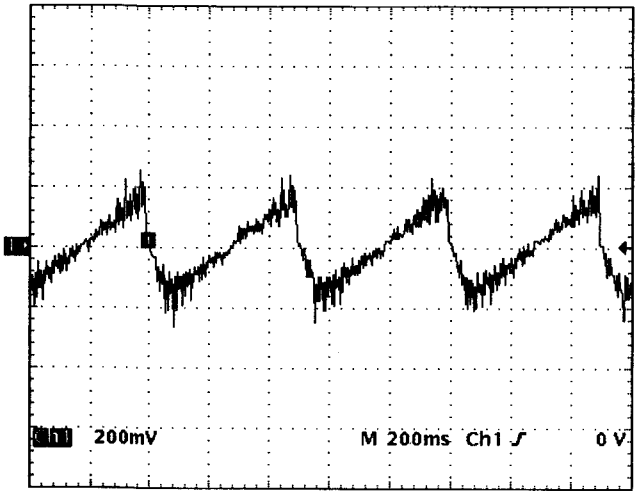
Check the connections and soldering of CN403, CN410 and CN418.
Check the power supply pins of the motor driver (CN410, CN410).


Stocker does not open or close.
Check that voltage (approx. 4 V) appears between IC500 pins 29 and 30.
NO
Check the mechanism switch for CN410 pins 2 and 10.
YES
Check that voltage (approx. 3.8 V) appears between IC410 pins 28 and 29.

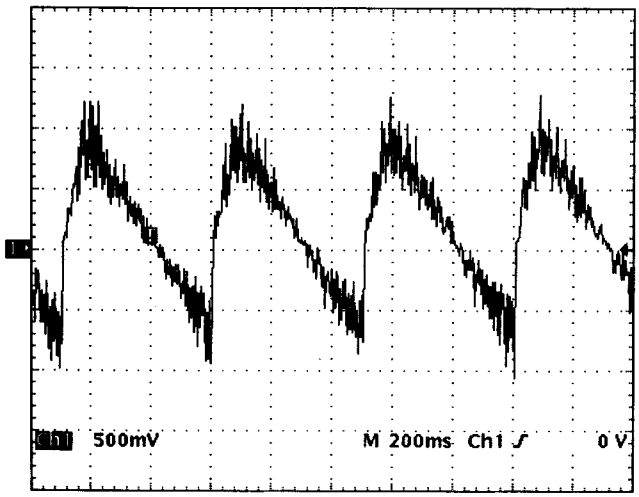

The disc is not loaded inside.
Check that voltage (approx. 4 V) appears between IC500 pins 27 and 28.
NO
Check the mechanism switch for CN410 pins 3 to 5.
YES
Check that voltage (approx. 5 V) appears between IC440 pins 7 and 9.

[eof]

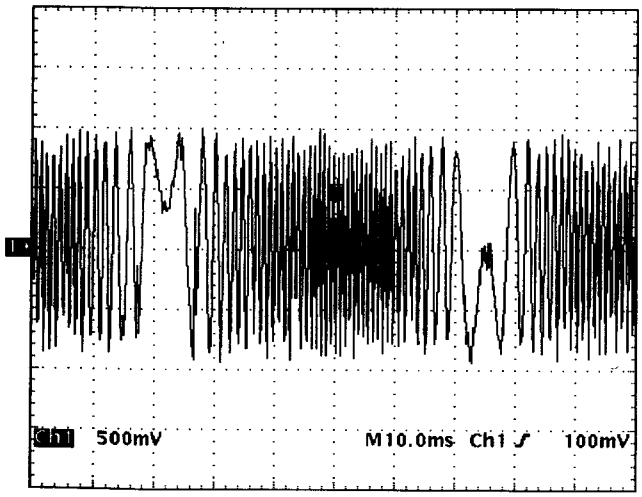
When the check is Reference waveform



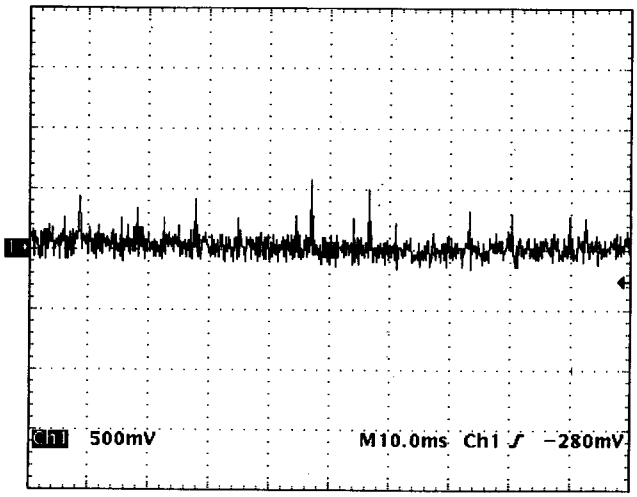
200mV/div 200ms/div Vref (Connected the ground of the oscillo scope with 21pin of IC410)



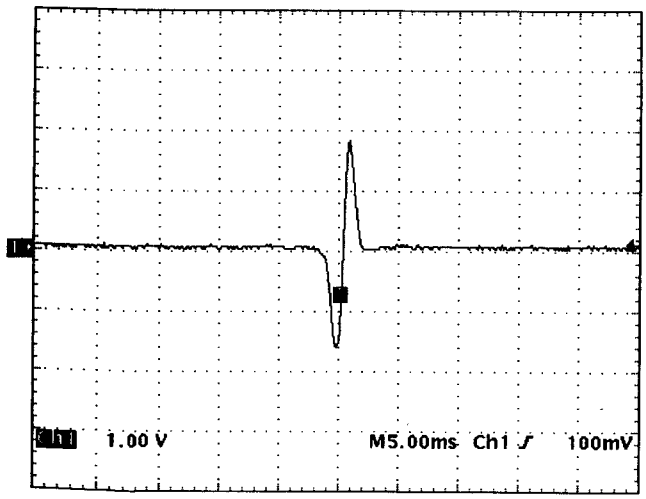
500mV/div 200ms/div Vref (Between the 8pin to 9pin of IC410)



500mV/div 10ms/div VC (Connected the ground of the oscillo scope with 3pin of IC310)



500mV/div 10ms/div VC (Connected the ground of the oscillo scope with 3pin of IC310)



1V/div 5ms/div VC (Connected the ground of the oscillo scope with 3pin of IC310)

Adjustments Method

Adjustment Procedures (MD Section)

1.Equipment necessary for adjustment

Oscilloscope
Laser power meter (Advantest TQ8210 or equal goods)
Sensor for Laser power meter (or the disc type sensor)
MD test disc "MRG-1018"
MD recordable disc

2. Test Mode Setup

Adjustments on electric circuits must be performed by setting the test mode to ON. Turn the power to this unit OFF and set to the clock (minute indication) mode. To activate the test mode, press the "1" and "10" numeric keys on the remote control simultaneously for approx. 2 seconds so that all the indications light up. After checking that all the indications light, press the "MD PLAY" key on the front panel to display the "MD NO DISC" indication. Then, hold the "EDIT" key for more than 1 second until the "TEST MODE" indication appears on the display.

3. EEPROM Initialization

In the test mode, press the "DISPLAY/CHARA" key on the front panel to display the "INITIAL" indication. Since the adjustment data stored in the EEPROM are cleared with this operation, be sure to complete all the adjustments.

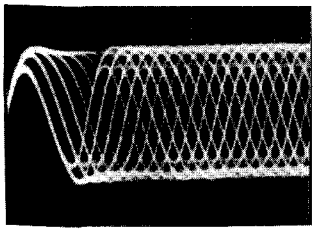
4. Adjusting Method

Insert the disc-shaped sensor into the disc insertion slot on the front panel.
As this unit employs a laser pickup that outputs more than 10 times the power of a conventional CD player to perform magnetic recording, pay special attention not to view the laser beam directly with your eyes or allow it to come in contact with your body while you are performing adjustments or checking operation. Also, be sure to use a disc with data recorded through the entire recordable area when performing a disc check after adjusting the laser power, and pay attention not to allow any dirt or cracks to appear on the disc until automatic adjustment is performed and setting values are stored in the EEPROM.

Item	Adjustment	Adjusting Point	Standard Value	
1. Laser Power Adjustment	1. When the "INITIAL" indication appears, press the SUPER WOOFER key so that the laser diode emits at the playback mode power level. Measure the laser beam at this time using the laser power meter, and adjust the laser power by pressing the ▶▶I(laser power up) or I◀◀ (laser power down) key. 2. Press the MID/TREBLE key on the front panel so that the laser diode emits at the recording mode power level. Measure the laser beam at this time using the laser power meter, and adjust the laser power by pressing the ▶▶I (laser power up) or I◀◀ (laser power down) key. 3. After adjustment is finished, press the MD STOP key and then the CANCEL key to eject the sensor. Then, load the pre-master disc and press the MD PLAY key. Wait for several seconds until the "OK C MODE" indication appears in the display, at which time adjustment is completed. If the "NG C MODE" indication is displayed, perform the above adjustment again. 4. After adjustment is completed, check recording and playback operation.	▶▶I key and I◀◀ key on the front panel (also possible with the remote control keys) No adjusting point (automatic adjustment)	1. Above 0.68 mW and as close as possible to 0.68 mW 2. Below 6.23 mW and as close as possible to 6.23 mW	Note) Perform this adjustment carefully as it could damage the laser diode. Note) Be sure to perform laser power adjustment before performing a disc check. Also, make sure the disc used for the disc check contains no abnormalities such as dirt or cracks.

2. RF Signal

RF signal available with the pre-mastered disc



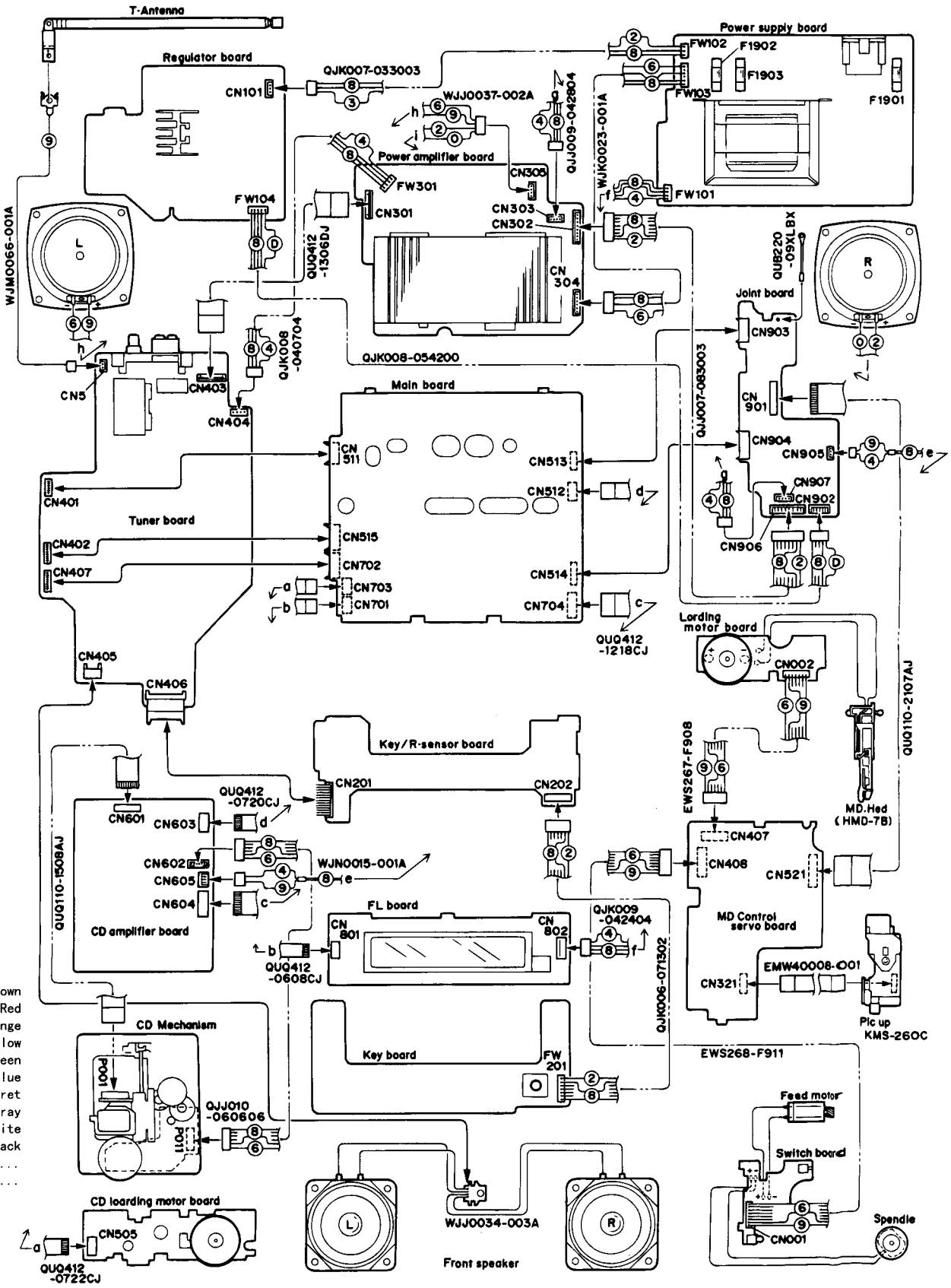
0.2V/div. 0.5μsec/div.

3. Checking (Independent Operation Mode)

After activating the test mode, press the Mode Select key on the remote control to set to "MD", then perform checking.

Focus ON	: TITLE key on the front panel
Pit rough servo	: ENTER key on the front panel
Groove rough servo	: MD REC key on the front panel
Tracking ON	: TIMER key on the front panel
Tracking OFF	: SET key on the front panel
STOP	: STOP key on the front panel
EJECT	: CANCEL key on the front panel

Wiring Connections



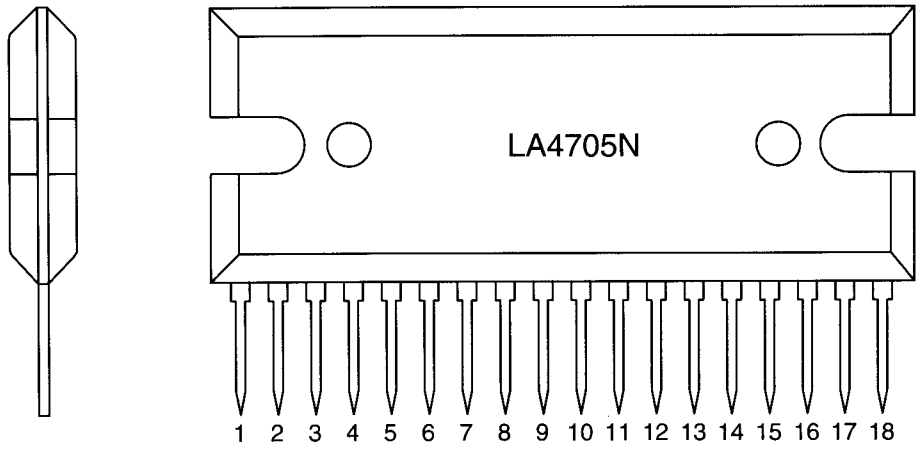
Color codes are shown below.

1. . . . . Brown
2. . . . . Red
3. . . . . Orange
4. . . . . Yellow
5. . . . . Green
6. . . . . Blue
7. . . . . Vioret
8. . . . . Gray
9. . . . . White
0. . . . . Black
P. . . . . .
D. . . . . .

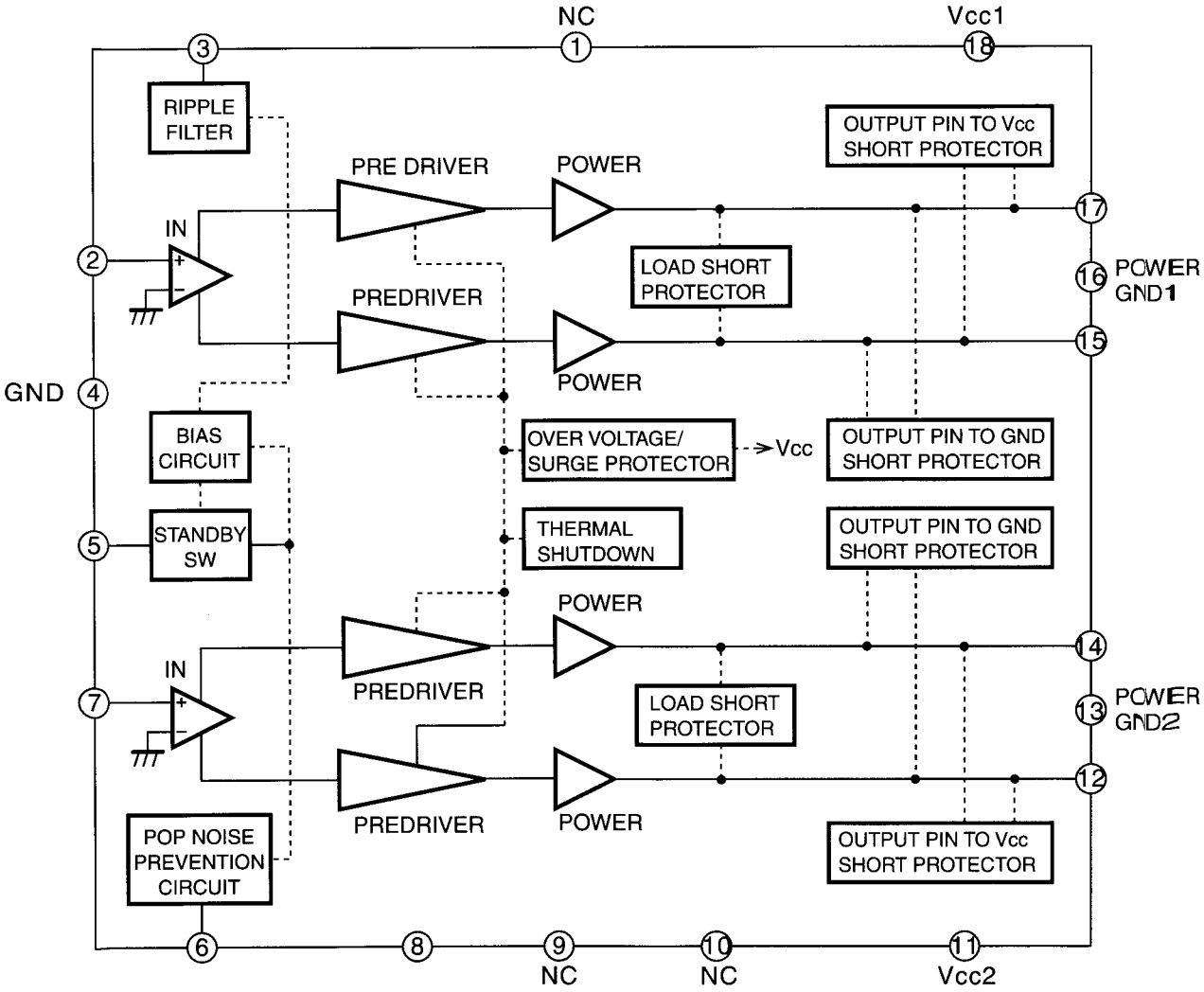
Description of Major IC's

■LA4705NA (IC301) Power amplifier for Woofer

1.Pin layout

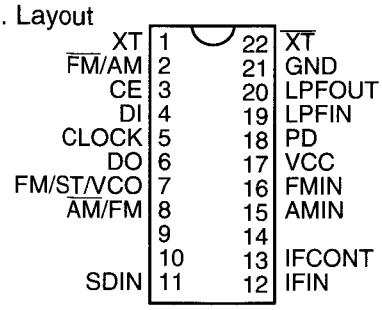


2. Block Diagram

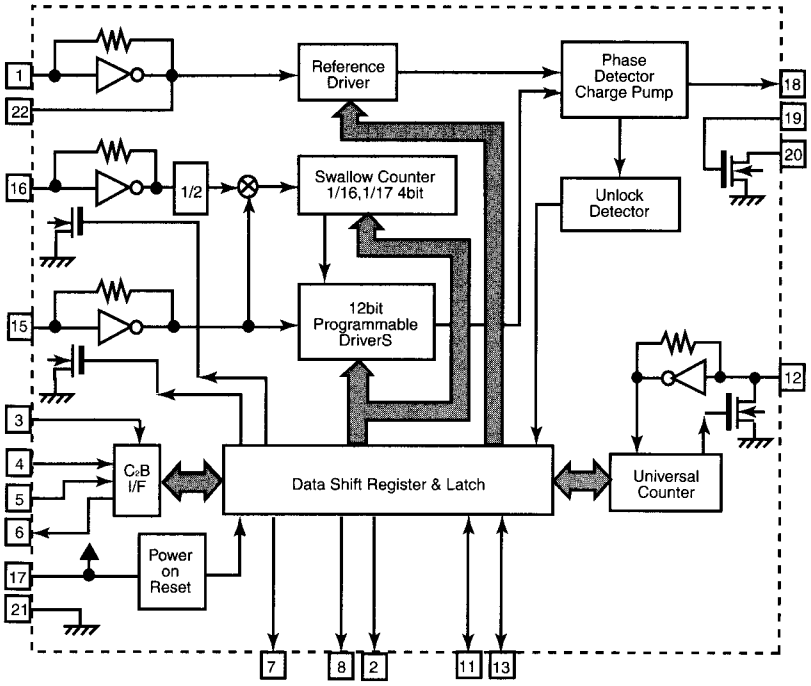


■LC72136N(IC2):PLL Frequency sinsesizer

1. Layout



2. Block

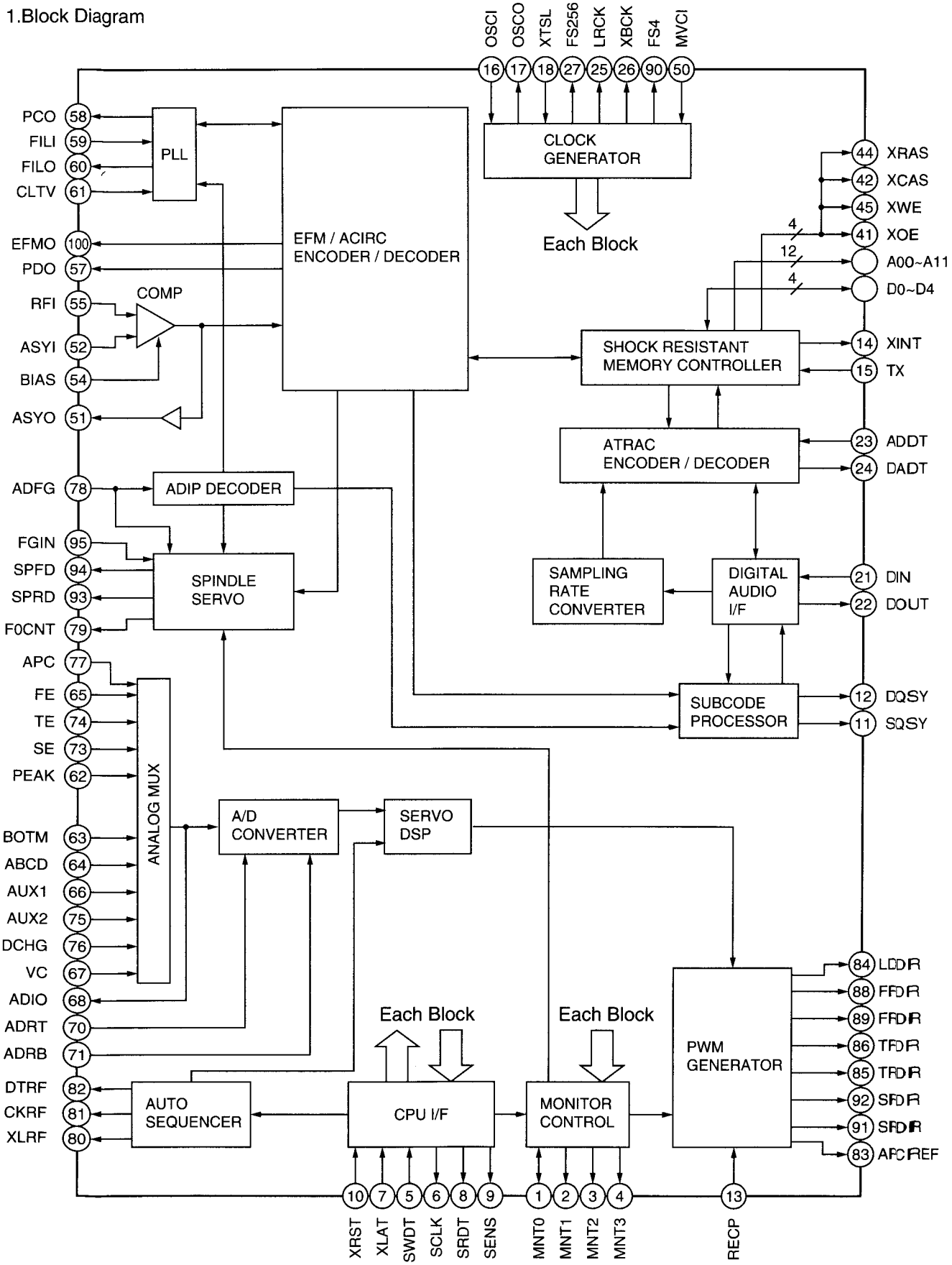


3. Function

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	FM/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the sirisl data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power suplly(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	AM/FM	O	Not use	19	LPFIN	I	Input for active lowpassfilter of PLL
9		-	Not use	20	LPFOUT	O	Output for active lowpassfilter of PLL
10		-	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	XT	I	X'tal oscillator(75KHz)

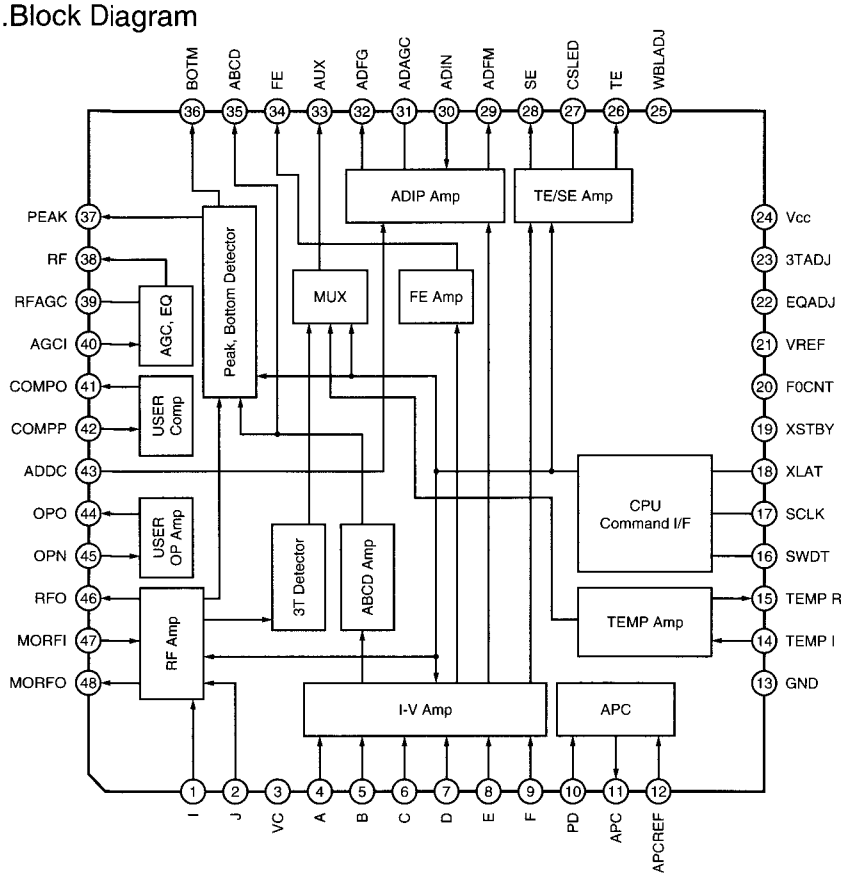
■CXD2652AR(IC350)

1.Block Diagram



■CXA2523AR(IC310):MD RF & Servo

1.Block Diagram



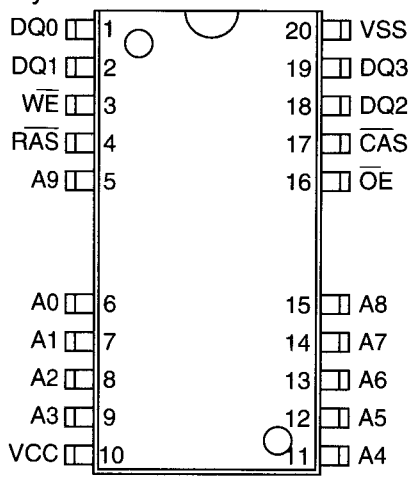
2.Pin Function

Pin No.	Symbol	I/O	Function
1	I	I	I-V converted RF signal I input.
2	J	I	I-V converted RF signal J input.
3	VC	O	Vcc/2 voltage output.
4	A	I	A current input for main beam servo signal.
5	B	I	B current input for main beam servo signal.
6	C	I	C current input for main beam servo signal.
7	D	I	D current input for main beam servo signal.
8	E	I	E current input for side beam servo signal.
9	F	I	F current input for side beam servo signal.
10	PD	I	Reflection light quantity monitor signal input.
11	APC	O	Laser APC output.
12	APCREF	I	Reference voltage input for the laser power intensity setting.
13	GND	-	Connect to GND.
14	TEMPI	I	Connects the temperature sensor.
15	TEMP R	I	Connects the temperature sensor. outputs the reference voltage.
16	SWDT	I	Data input for microcomputer serial interface.
17	SCLK	I	Shift clock input for microcomputer serial interface.
18	XLAT	I	Latch signal input for microcomputer serial interface.Latched when low.
19	XSTBY	I	Standby setting pin. Normal operation when high Standby when low.
20	FOCNT	I	Internal current source setting pin.

Pin No.	Symbol	I/O	Function
21	VREF	O	Reference voltage output.
22	EQADJ	I/O	Equalizer center frequency setting pin.
23	3TADJ	I/O	BPF3T center frequency setting pin.
24	Vcc	-	Power supply.
25	WBLADJ	I/O	BPF22 center frequency setting pin.
26	TE	O	Tracking error signal output.
27	CSLED	-	Connects the sled error signal LPF capacitor.
28	SE	O	Sled error signal output.
29	ADFM	O	ADIP FM signal output.
30	ADIN	I	ADIP signal comparator input.
31	ADAGC	-	Connects the ADIPAGC capacitor.
32	ADFG	O	ADIP2 binary value signal output.
33	AUX	O	13 output / temperature signal output. Switched with serial commands.
34	FE	O	Focus error signal output.
35	ABCD	O	Reflection light quantity signal output for the main beam servo detector.
36	BOTM	O	RF/ABCD bottom hold signal output.
37	PEAK	O	Peak hold signal output for the RF/ABCD signals.
38	RF	O	RF equalizer output.
39	RFAGC	-	Connects the RFAGC capacitor.
40	AGCI	I	RFAGC input.
41	COMPO	O	User comparator output.
42	COMPP	I	User comparator non-inverted input.
43	ADDC	I/O	Connects the capacitor for ADIP amplifier feedback circuit.
44	OPO	O	User operational amplifier output.
45	OPN	I	User operational amplifier inverted input.
46	RFO	O	RF amplifier output. Eye pattern checkpoint.
47	MORFI	I	Input of the groove RF signal with AC coupling.
48	MORFO	O	Groove RF signal output.

■MN41V4400TT (IC390):D RAM

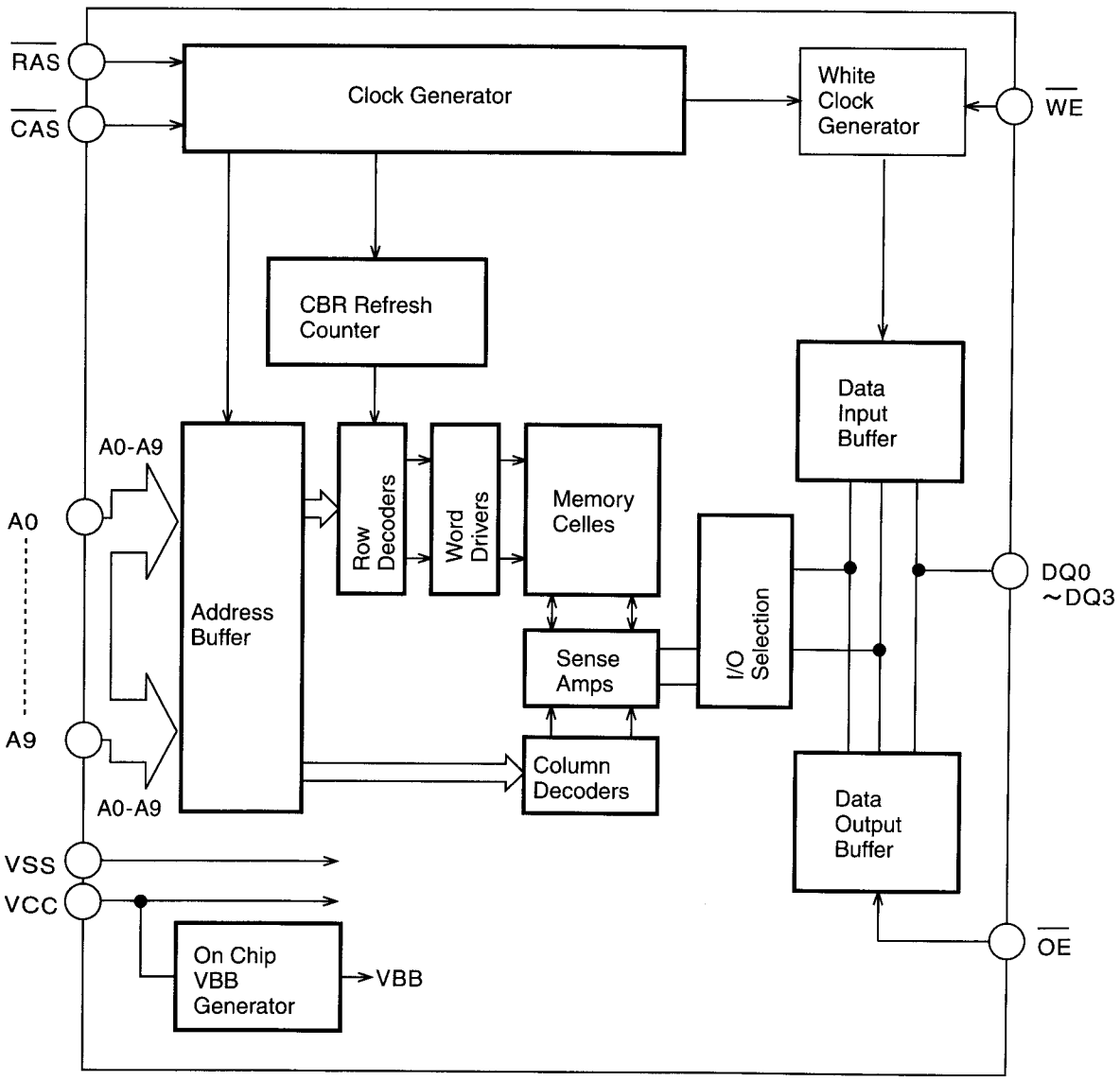
1.Layout



2.Pin Function

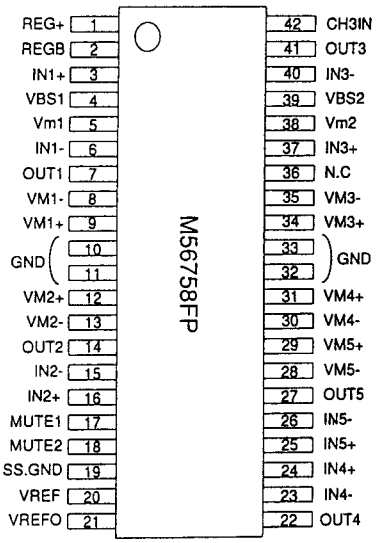
Synbol	Function
A0 - A9	Address Input
$\overline{RAS}$	Low Address Strove
$\overline{CAS}$	Colomun Address Strove
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output /Enable Input
DQO - DQ3	Data Input/Output
VCC	Power Supply (+3.3V)
VSS	Power Supply (0V)
NC	Non Connection

3. Block Diagram

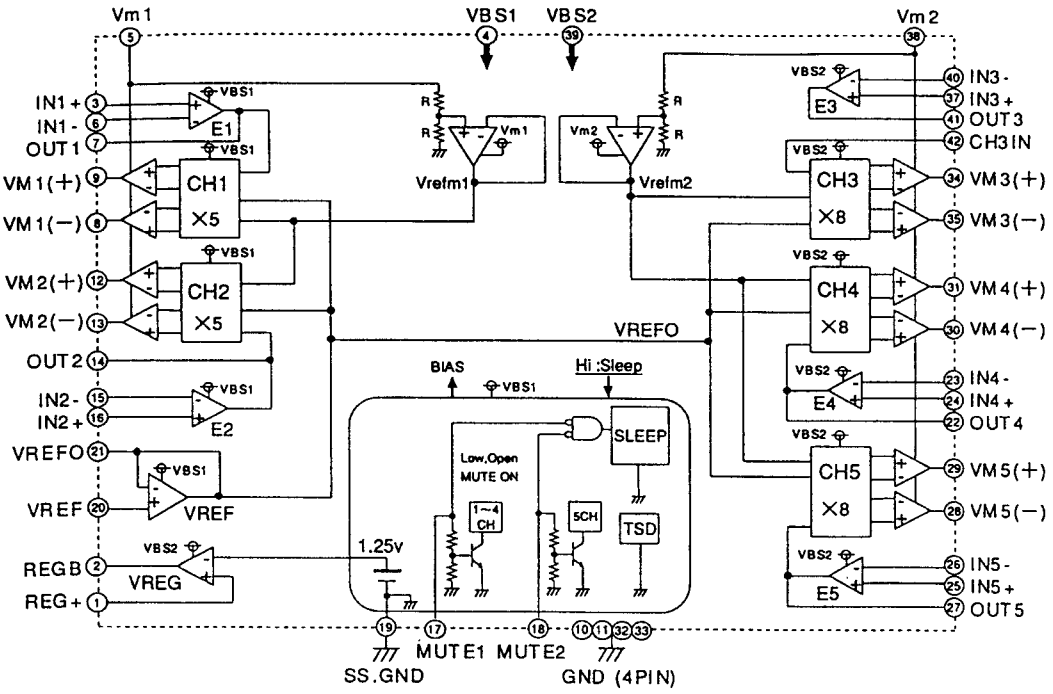


■M56758FP-X(IC410):5Channnel actuater driver

1.Layout

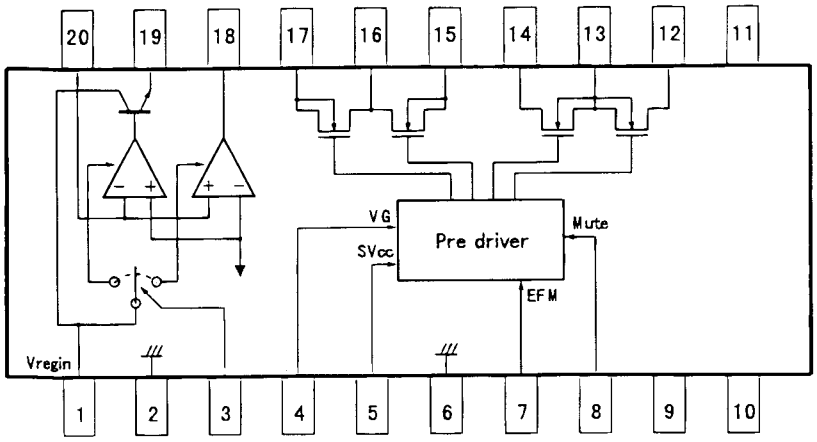


2.Block Diagram



■BD7910FV-X(IC450):Pre driver

1.Block Diagram

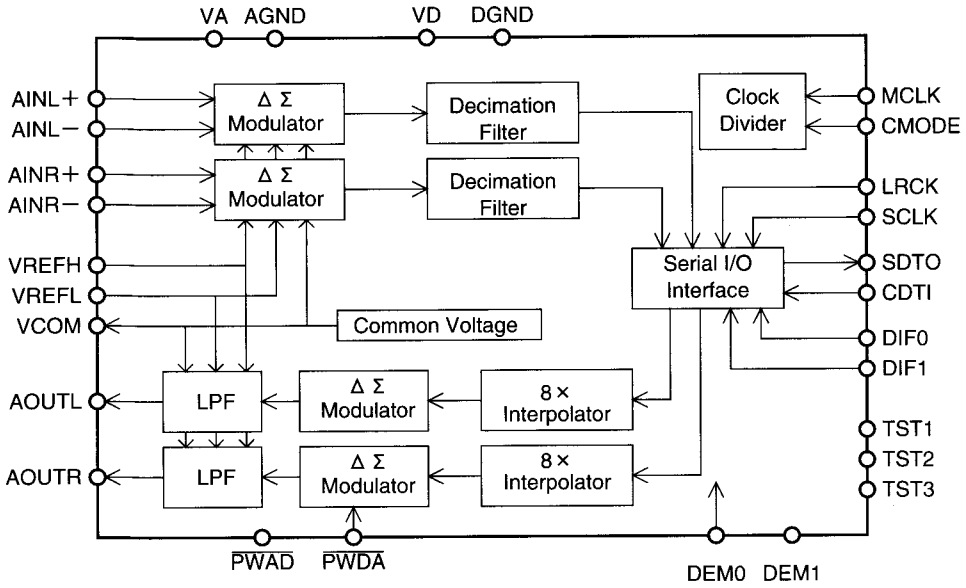


2.Pin Function

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	Vreg IN	I	Regulator input and regulator power supply	11	NC	-	Non connect
				12	VOD2	O	Sync.output (Lower power MOS,drain)
2	Reg GN	-	Regulator GND	13	VSS	-	"H"bridge GND (Lower power MOS,source)
3	NC	-	Non connect	14	VOD1	O	Sync.output (Lower power MOS,drain)
4	VG	I	Voltage input for power MOS drive	15	VOS1	O	Source output (Upper power MOS,source)
5	SVCC	O	EFM high level output voltage	16	VDD	-	"H" bridge power supply terminal (Upper power MOS,source)
6	PDGND	-	Pre-driver GND				
7	EFM	I	EFM signal input	17	VOS2	O	Source output (Upper power MOS,source)
8	MUTE	I	Mute control (Low active)	18	Reg DRV	O	External PNP drive output for regulator
9	NC	O	Non conncet	19	Reg OUT	O	Reglator output (Emitter follower output)
10	NC	O	Non connect	20	Reg NF	-	Regulator feedbaack terminal

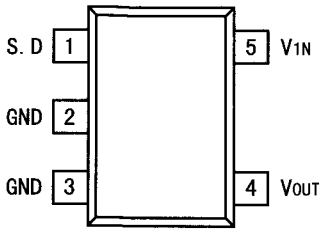
■AK4520A-VF-X(IC480):A/D & D/A Conberter

1. Block Diagram

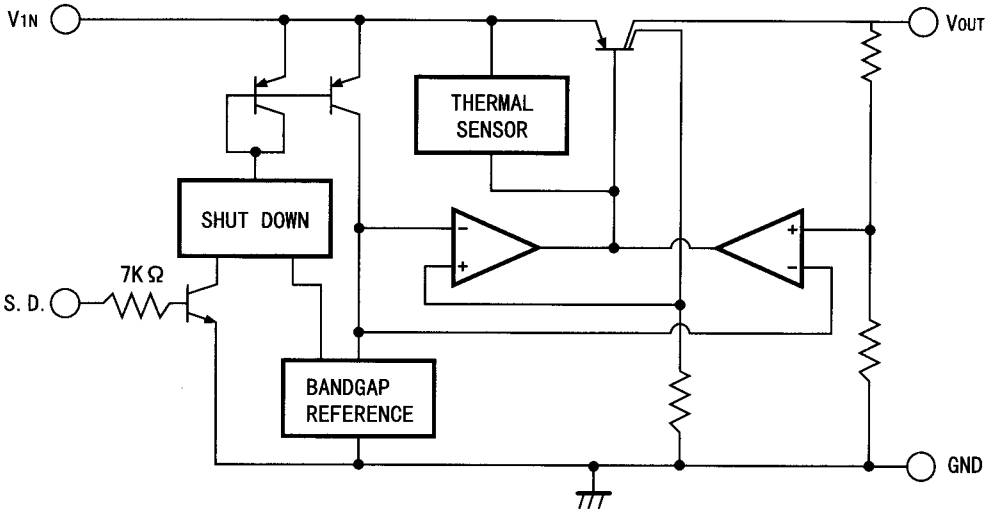


■IC485 TK71340M : Regulator

1. Lay out

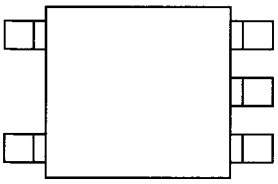


2. Block Diagram

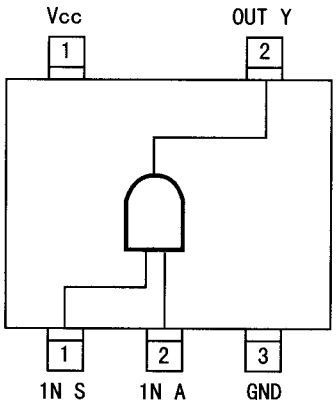


■IC340 TC7S08F

1. Lay out

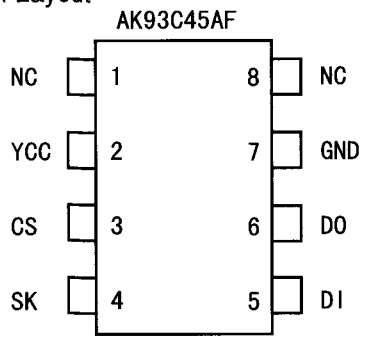


2. Block Diagram



■AK93C45AF-W(IC590):CMOS EEPROM

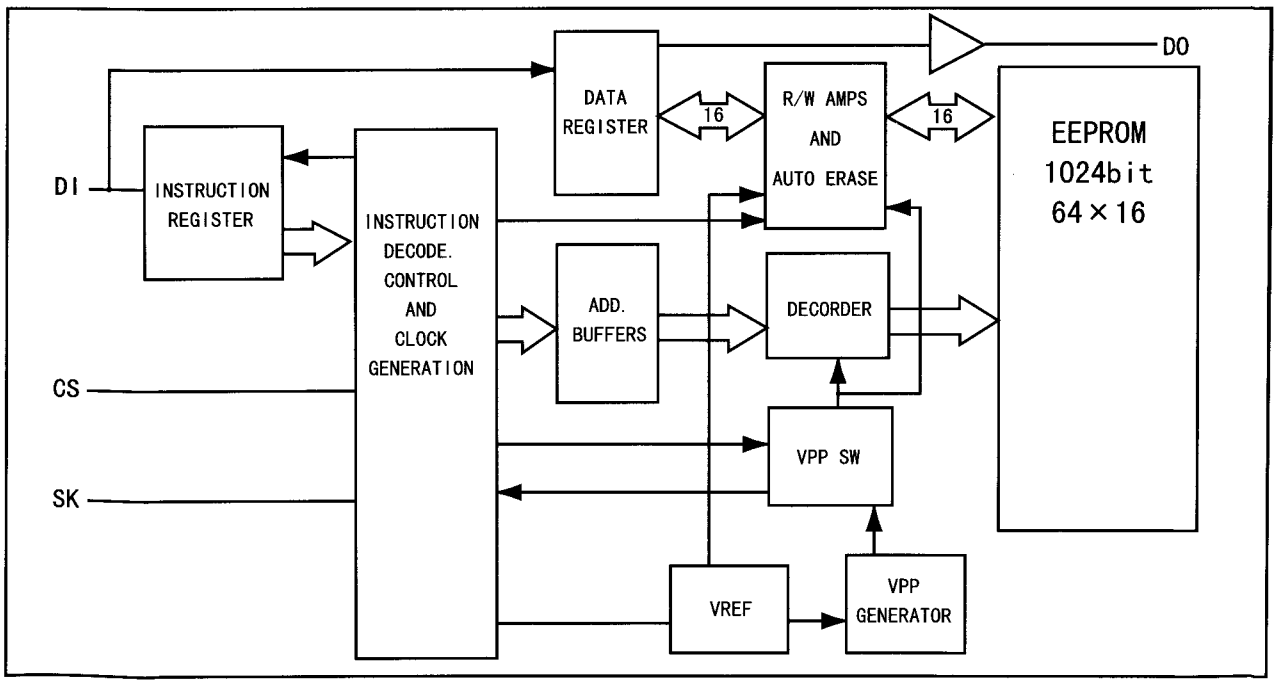
1.Pin Layout



2.Pin Function

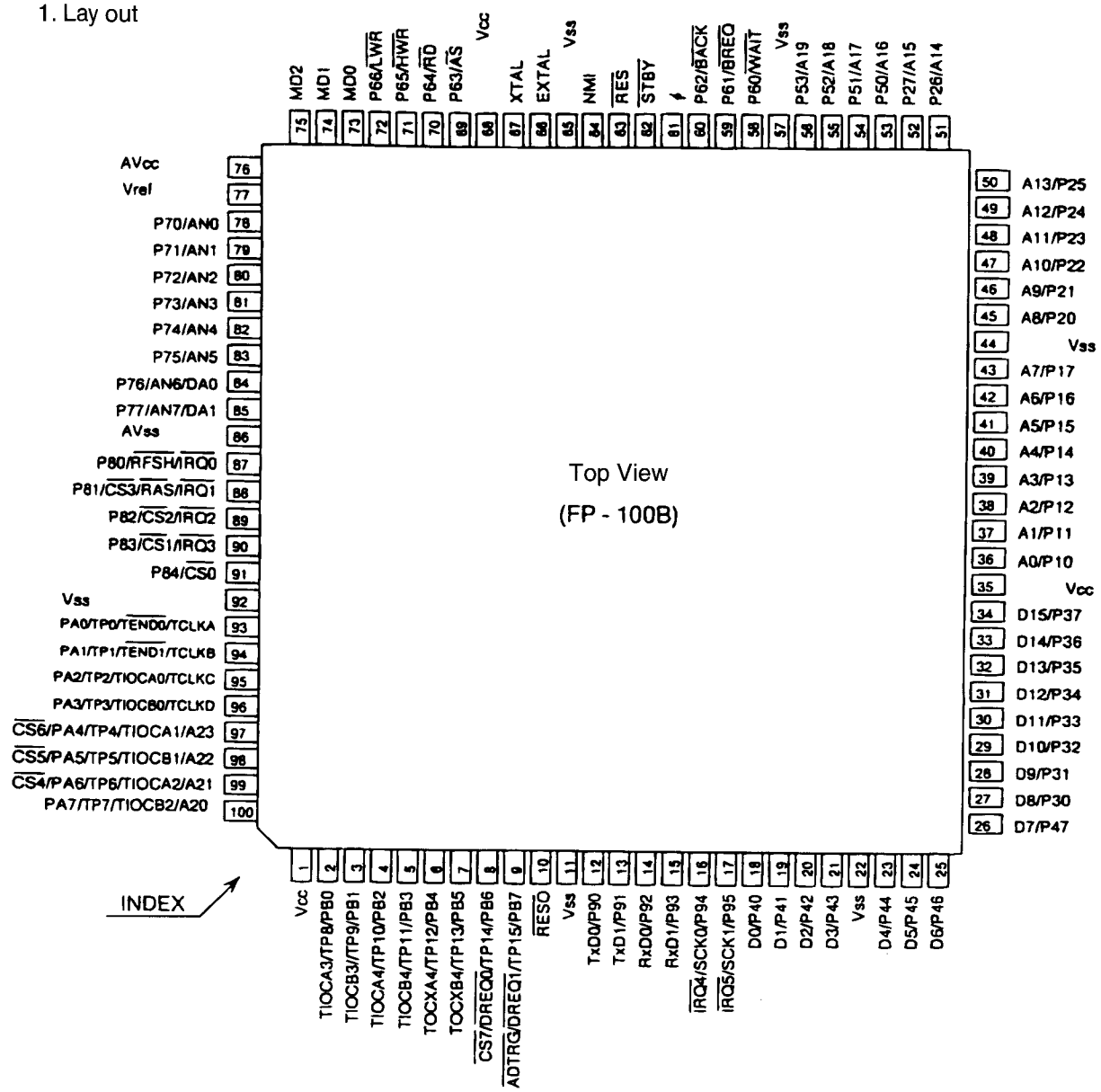
Symbol	Function
CS	Chip Select
SK	Serial Clock Input
DI	Serial Data Input
DO	Serial Data Output
Vcc	Power Supply
GND	Ground
NC	Non connection

3.Block Diagram



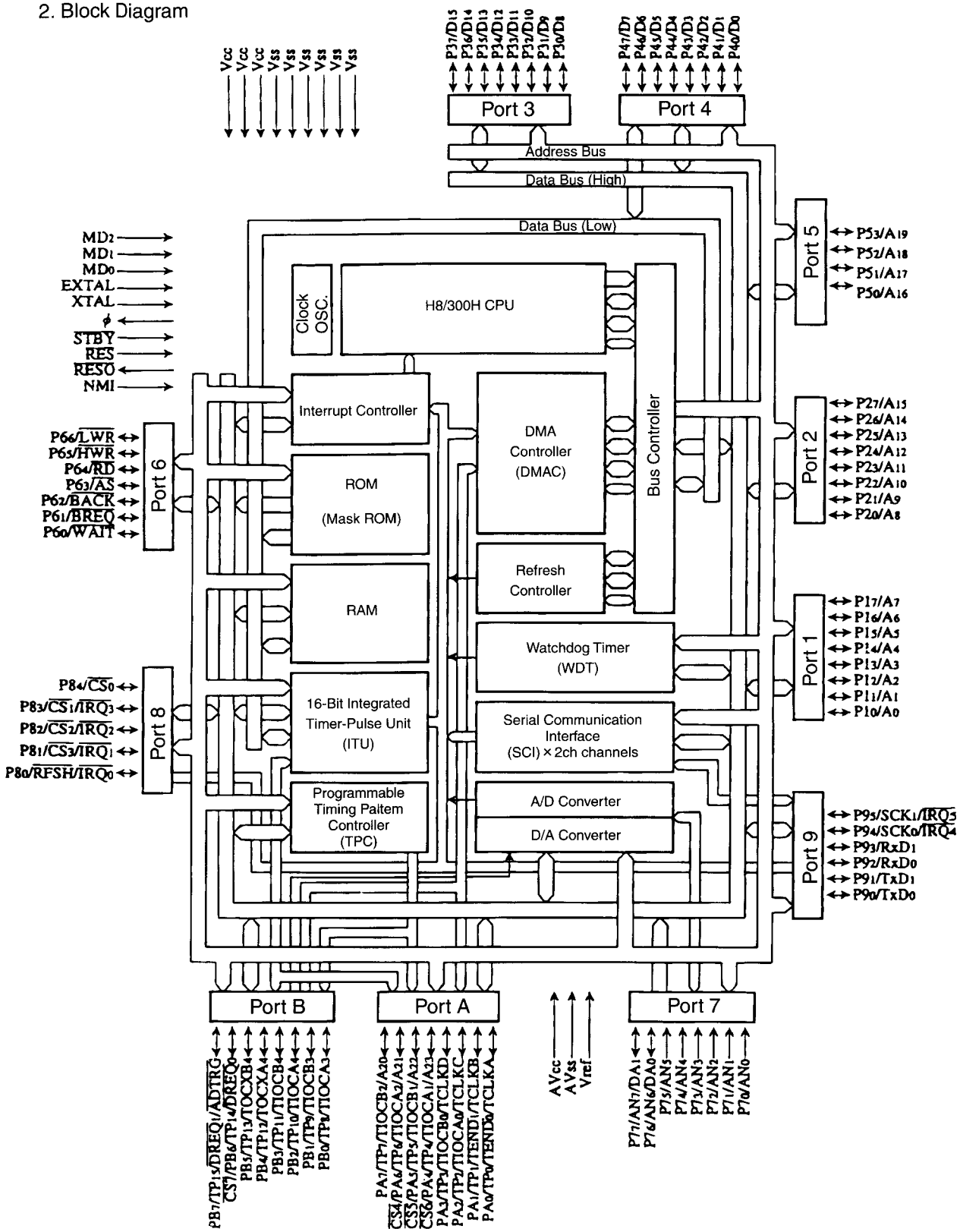
■IC500 HD6433045SV

1. Lay out



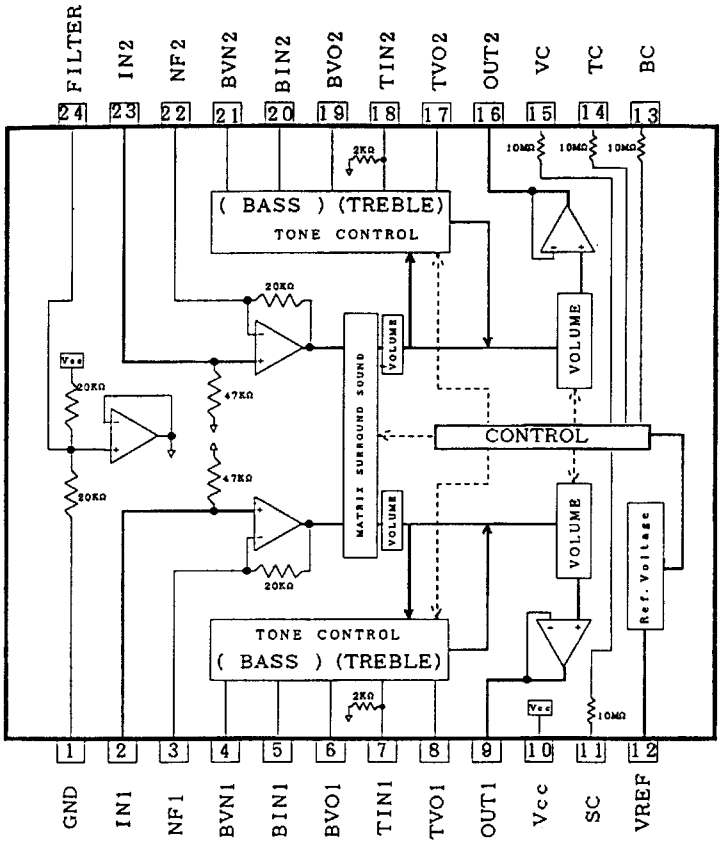
■IC500 HD6433045SV

2. Block Diagram



■BH3852S(IC503):E.VOLUME

1.Block Diagrams

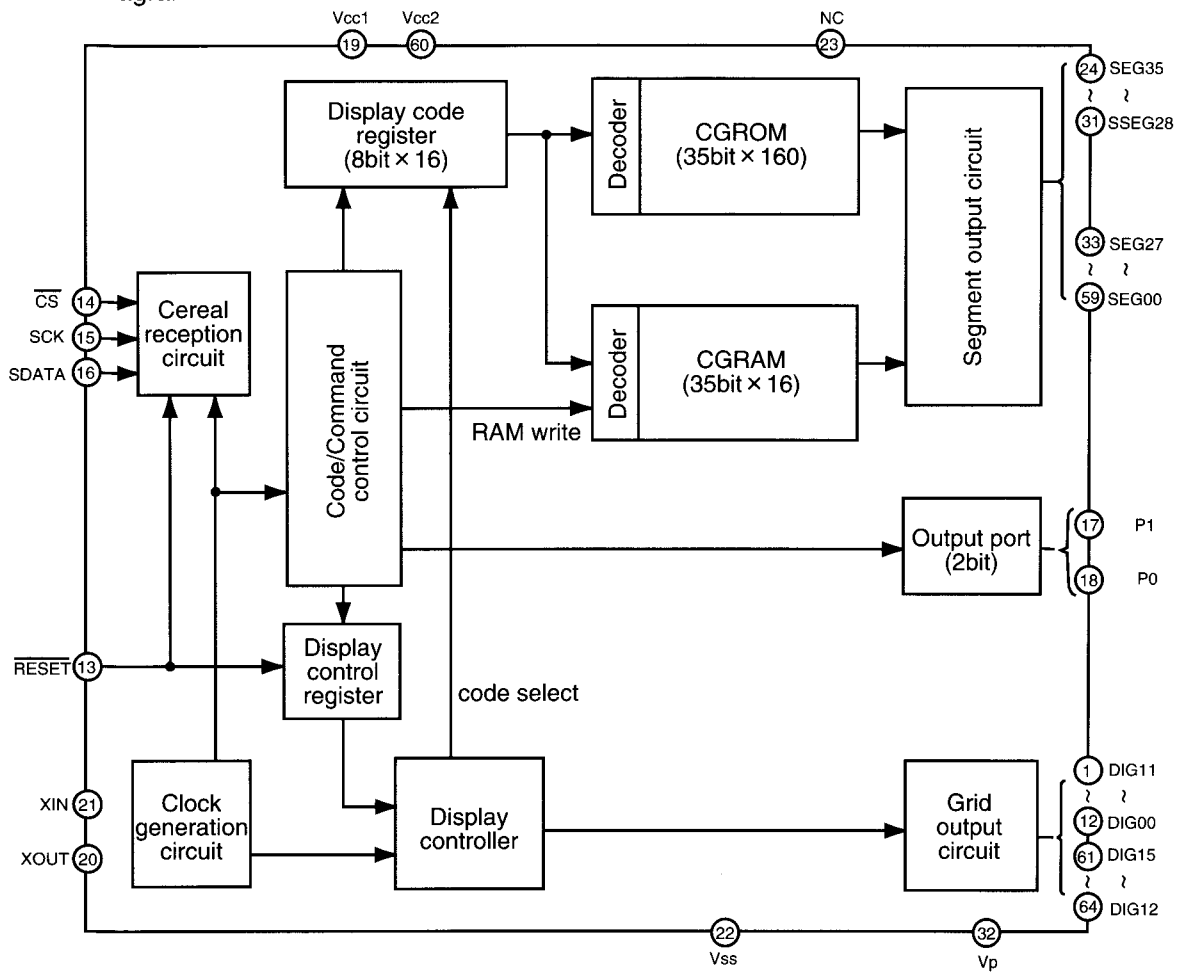


2.Pin Function

PinNo.	Symbol	I/O	Function	PinNo.	Symbol	I/O	Function
1	GND	-	Connect to GND.	13	BASS	I	Terminal for bass control.
2	IN1	I	Terminal for 1ch volume input.	14	TRE	I	Terminal for treble control.
3	NF1	I	Terminal for gain adjustment of input step AMP.	15	VOL	I	Terminal for volume control.
				16	OUT2	O	Terminal for 2ch volume output.
4~6	BASS1	-	Terminal for connection of 1ch low-frequency filter.	17.18	TRE2	-	Terminal for connection of 2ch high-frequency filter.
7.8	TRE1	-	Terminal for connection of 1ch high-frequency filter.	19~21	BASS2	-	Terminal for connection of 2ch low-frequency filter.
9	OUT1	O	Terminal for 1ch volume output.	22	NF2	I	Terminal for gain adjustment of input step AMP.
10	VCC	-	Terminal for power supply.				
11	LIVE	-	Terminal for surround control.	23	IN2	I	Terminal for 2ch volume input.
12	VREF	O	Terminal for referance voltage output.	24	VSET	-	Terminal for filter.

■M66004FP (IC801):FL DRIVER

1.BlocK Diagram

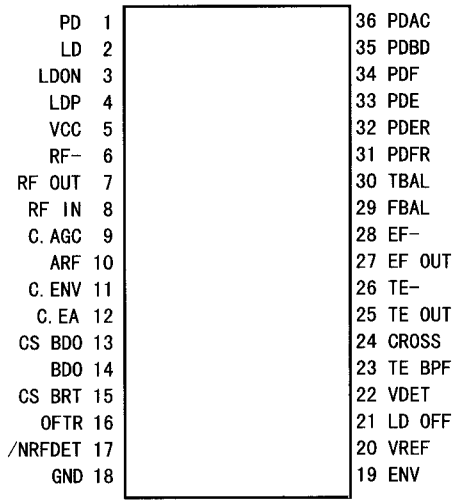


2.Pin function

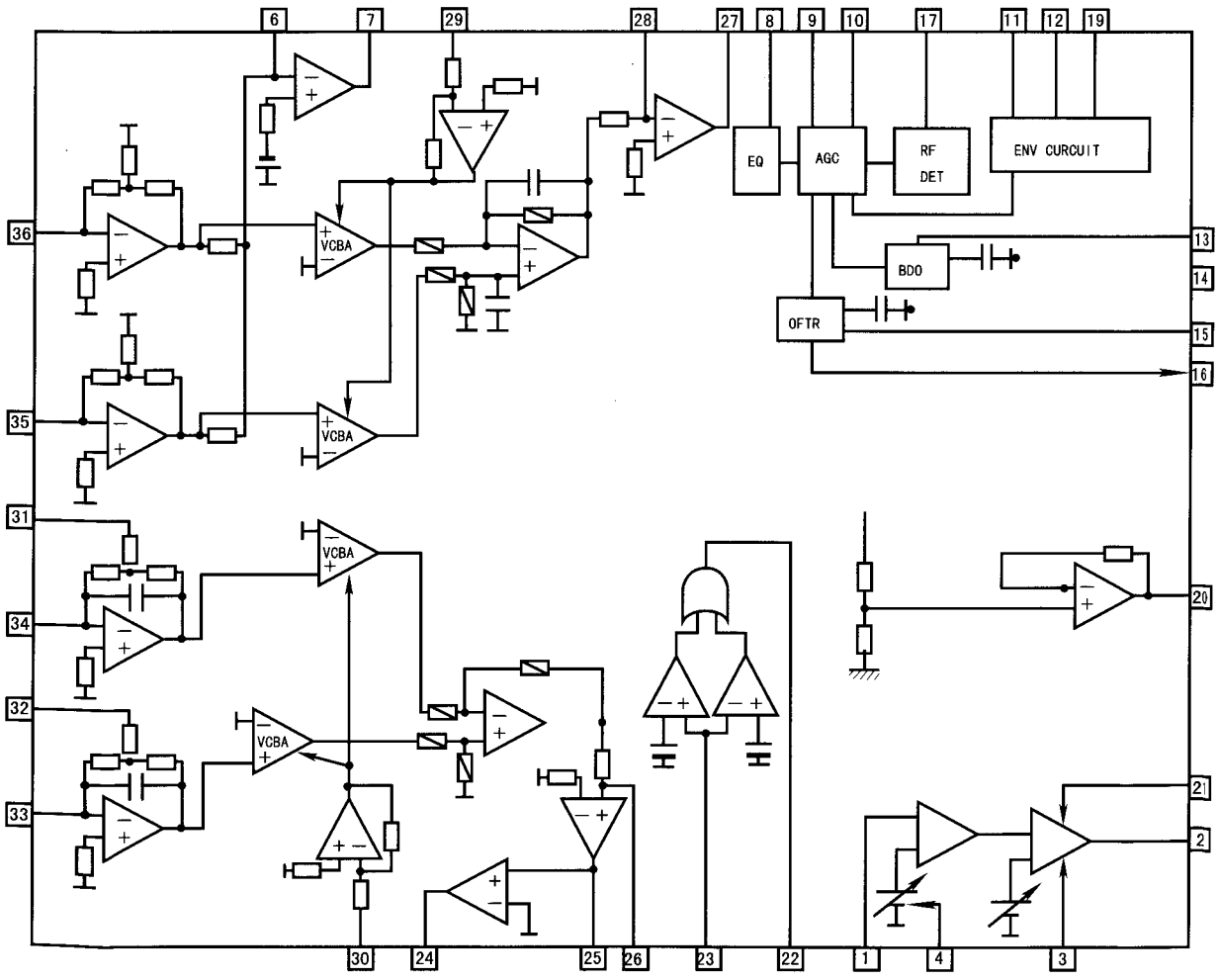
Pin.No.	Symbol	I/O	Function
1	D11		Non connect
2~12	D10~D0	O	FL grid control signal output.
13	$\overline{\text{RESET}}$	I	FL Driver chip select.
14	CS	I	Chip select signal input.
15	SCK	I	Shift clock signal input.
16	SDATA	I	Serial data input.
17	P1	O	Indicator control signal output.
18	P0	O	Indicator control signal output.
19	VCC1	-	Power supply for internal logic.
20	XOUT	O	Clock signal output.
21	XIN	I	Clock signal input.
22	VSS	-	Connect to GND.
23	SEG35	-	Non connect.
24~31	SEG34~SEG27	O	FL Segment control signal output.
32	VP	-	Power supply.
33~59	SEG26~SEG00	O	FL Segment control signal output.
60	VCC2	-	Power supply for grid output and segment output.
61~64	D15~D12	O	FL grid control signal output.

■AN8806SB(IC601):RF&Servo amplifire

1.Layout



2.Block Diagram

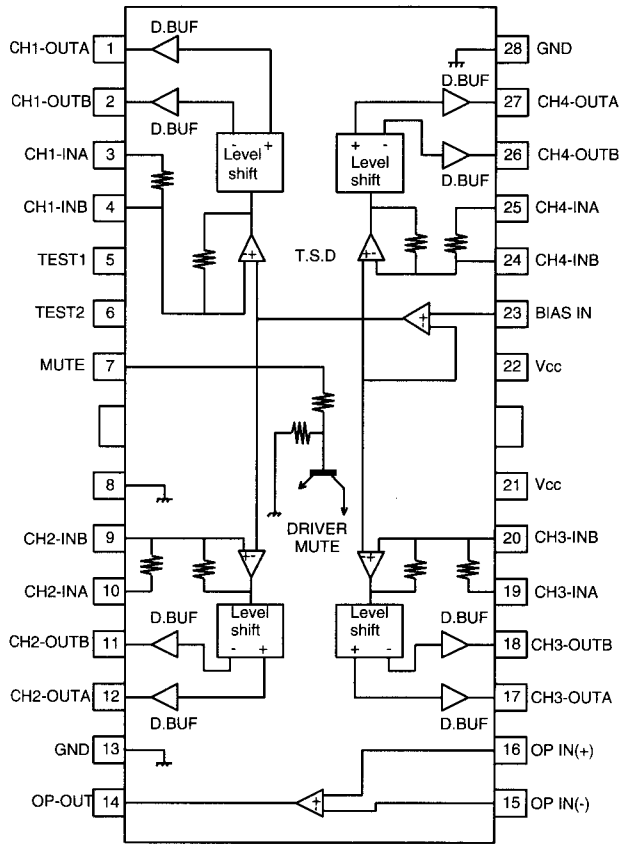


3. Pin Functions

Pin No.	Symbol	I/O	Functions and operations
1	PD	I	APC amp input terminal
2	LD	O	APC amp output terminal
3	LD ON	I	APC ON/OFF control terminal
4	LDP	--	Connect to ground
5	VCC	--	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RFamp output
8	RF IN	I	RF input
9	C.AGC	I/O	Connecting pin of AGC loop filter
10	ARF	O	RF output
11	C.ENV	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
12	C.EA	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
13	CS BDO	I/O	A capacitor is connected to detect the lower envelope of RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of RF signal
16	OFTR	O	Of-track status signal output
17	/NRFDET	O	RF detection signal output
18	GND	--	Ground
19	ENV	O	Envelope output
20	VREF	O	Reference voltage output
21	LD OFF	--	Connect to ground
22	VDET	O	Vibration detection signal output
23	TE BPF	I	Input pin of tracking error through BPF
24	CROSS	O	Tracking error cross output
25	TE OUT	O	Tracking error signal output
26	TE-	I	Inverse input pin for tracking error amp
27	FE OUT	O	Output pin of focus error
28	FE-	I	Inverse input pin for focus error amp
29	FBAL	I	Focus balance control
30	TBAL	I	Tracking balance control
31	PDFR	I/O	F I-V amp gain control
32	PDER	I/O	E I-V amp gain control
33	PDF	I	I-V amp input
34	PDE	I	I-V amp input
35	PD BD	I	I-V amp input
36	PD AC	I	I-V amp input

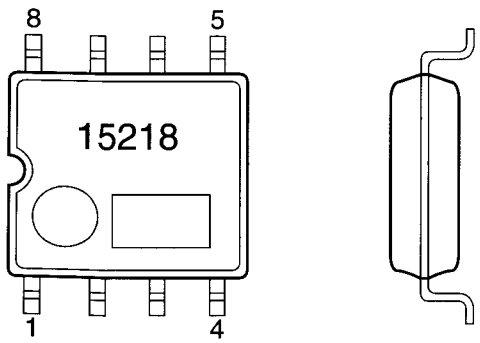
■BA6897FP(IC602) 4channel driver

1. Block Diagram

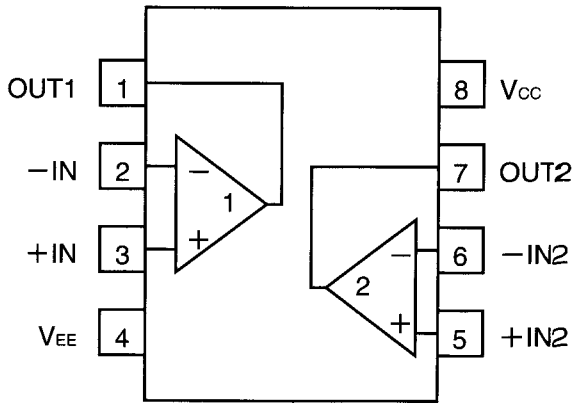


■BA15218F(IC303/501/502/504/401/421/441/461) OP Amplifire

1. Lay out

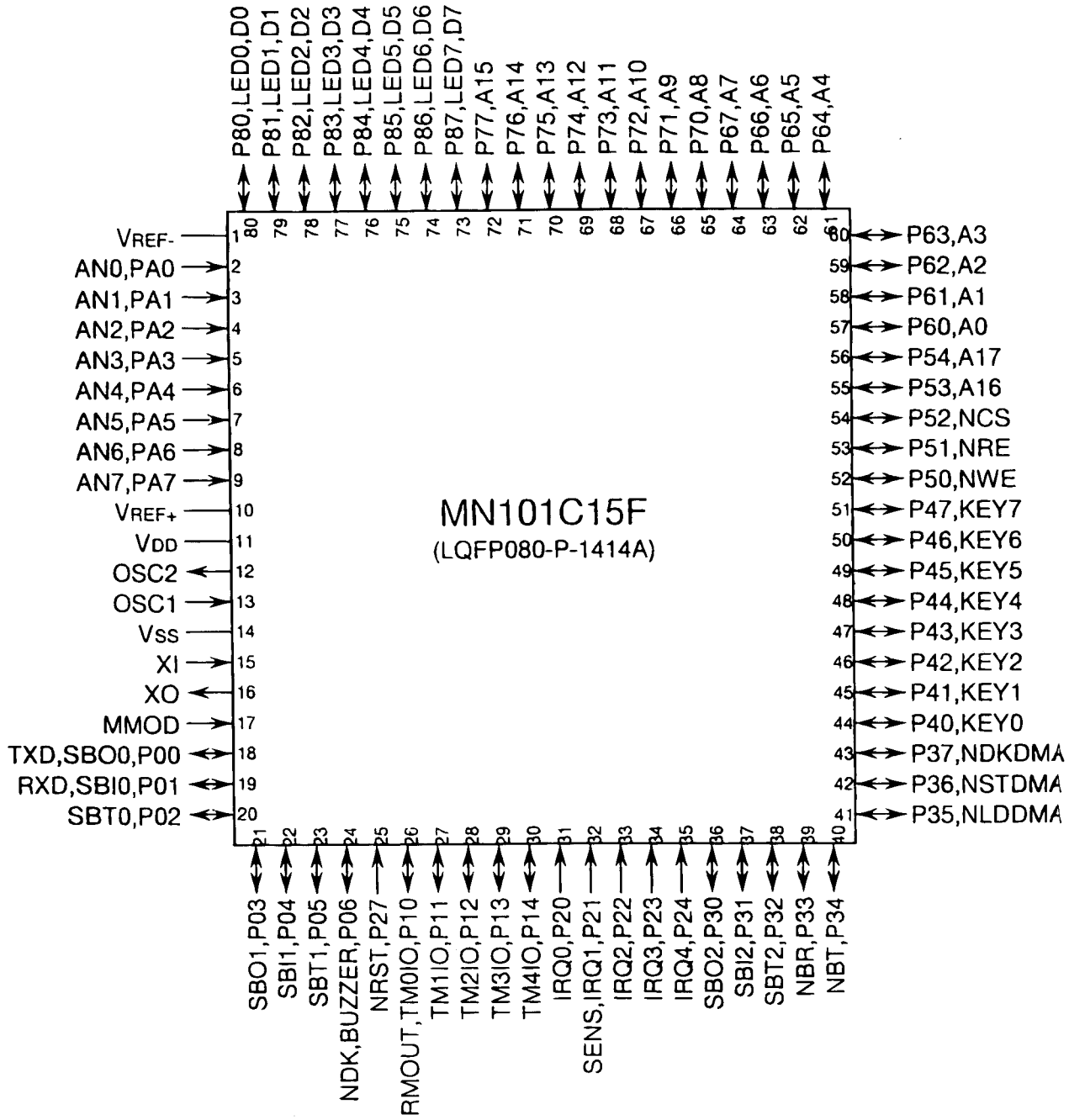


2. Block Diagram



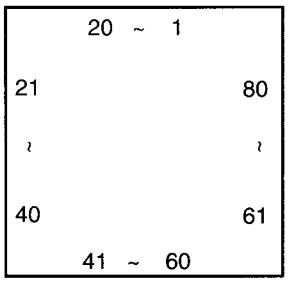
■MN101C15FAN (IC701): System Microprocessor

1. Lay out

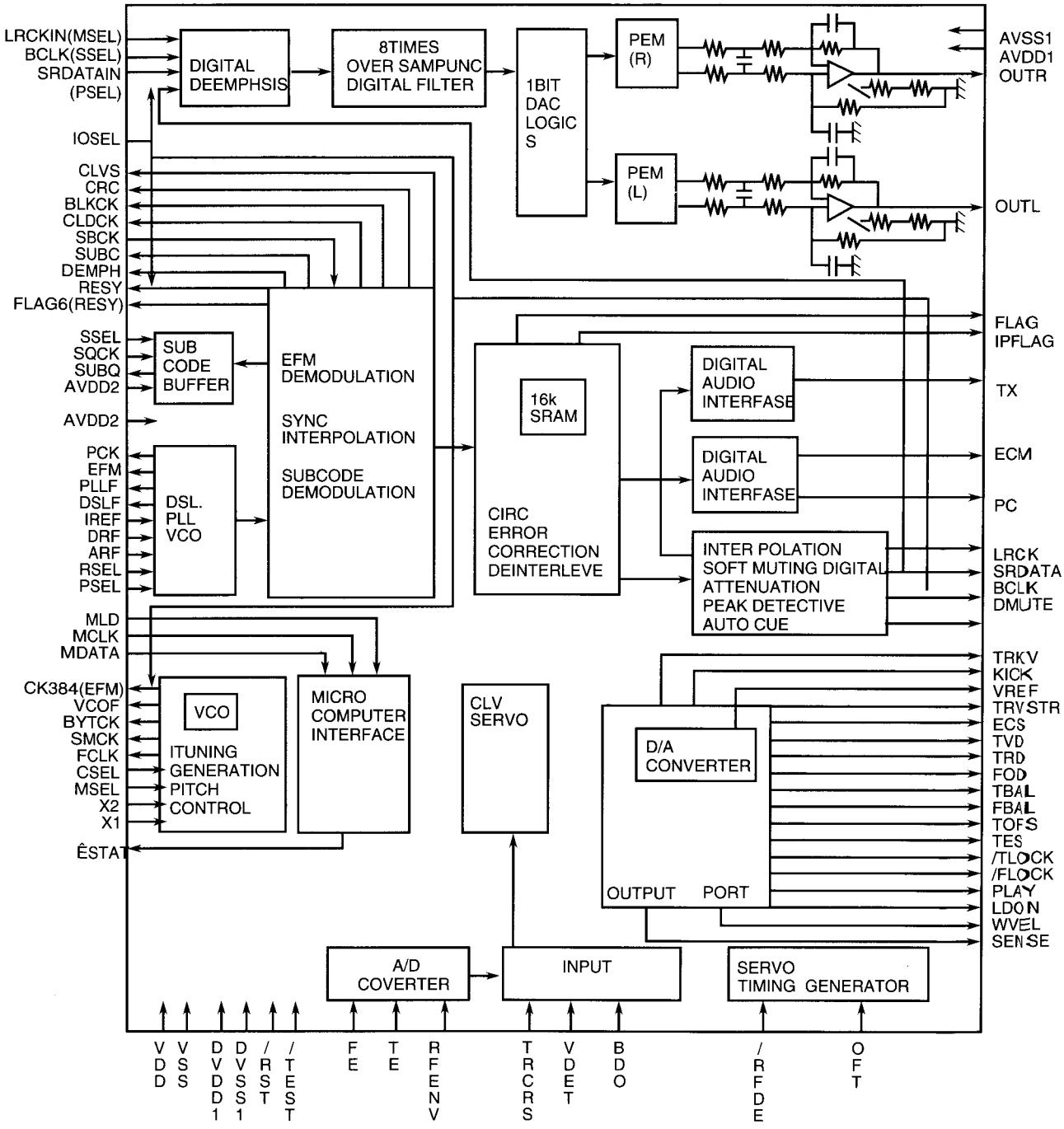


■MN35510 (IC603) Digital servo & Digital signal Processor

1. Layout



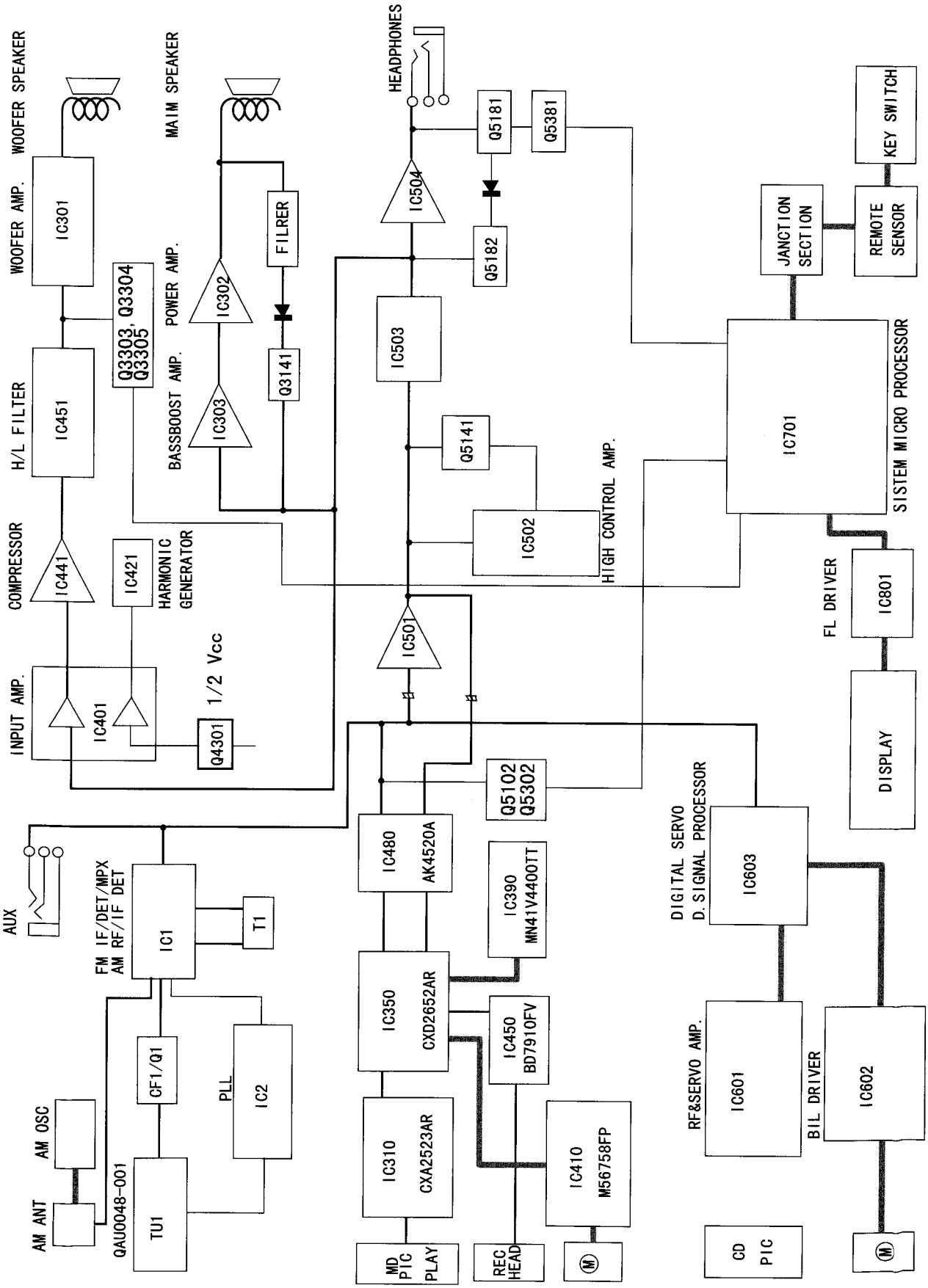
2. Block Diagram



3. Functions

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output(H:shunt)
2	LRCK	O	Not used	42	PLAY	–	Not used
3	SRDATA	O	Not used	43	WVEL	–	Not used
4	DVDD1	–	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	–	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	μcom command clock signal input (Data is latched at signal's rising point)	47	DSLF	I/O	Loop filter pin for DSL
8	MDATA	I	μcom command data input	48	PLLF	I/O	Loop filter pin for PLL
9	MLD	I	μcom command load signal input	49	VCOF	–	Not used
10	SENSE	O	Sence signal output	50	AVDD2	–	Power supply(Analog)
11	FLOCK	O	Focus lock signal output Active :Low	51	AVSS2	–	Connected to GND(Analog)
12	TLOCK	O	Tracking lock signal output Active :Low	52	EFM	–	Not used
13	BLKCK	O	sub-code·block·clock signal output	53	PCK	–	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	–	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	–	Not used
16	DMUTE	–	Connected to GND	56	SBCK	–	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	–	Connected to GND(for X'tal oscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	–	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	–	Not used	60	VDD	–	Power supply(for X'tal cscillation circuit)
21	TRV	O	Traverse enforced output	61	BYTCK	–	Not used
22	TVD	O	Traverse drive output	62	CLDCK	–	Not used
23	PC	–	Not used	63	FLAG	–	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	–	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	–	Not used
26	KICK	O	Kick pulse output	66	CLVS	–	Not used
27	TRD	O	Tracking drive output	67	CRC	–	Not used
28	FOD	O	Focus drive output	68	DEMPH		Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	–	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	–	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	–	pull up
32	FE	I	Focus error signal input(Analog input)	72	AVDD1	–	Power supply(Digital)
33	TE	I	Tracking error signal input(Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input(Analog input)	74	AVSS1	–	Connected to GND
35	VDET	I	Vibration detect signal input(H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input(H:off track)	76	RSEL	–	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	–	Connected to GND
38	RFDET	I	RF detect signal input(L:detect)	78	PSEL	–	Connected to GND
39	BDO	I	BDO input pin(L:detect)	79	MSEL	–	Connected to GND
40	LDON	O	Laser ON signal output(H:on)	80	SSEL	–	Pull up

Block Diagram



Standard Schematic Diagrams

■ Display circuit

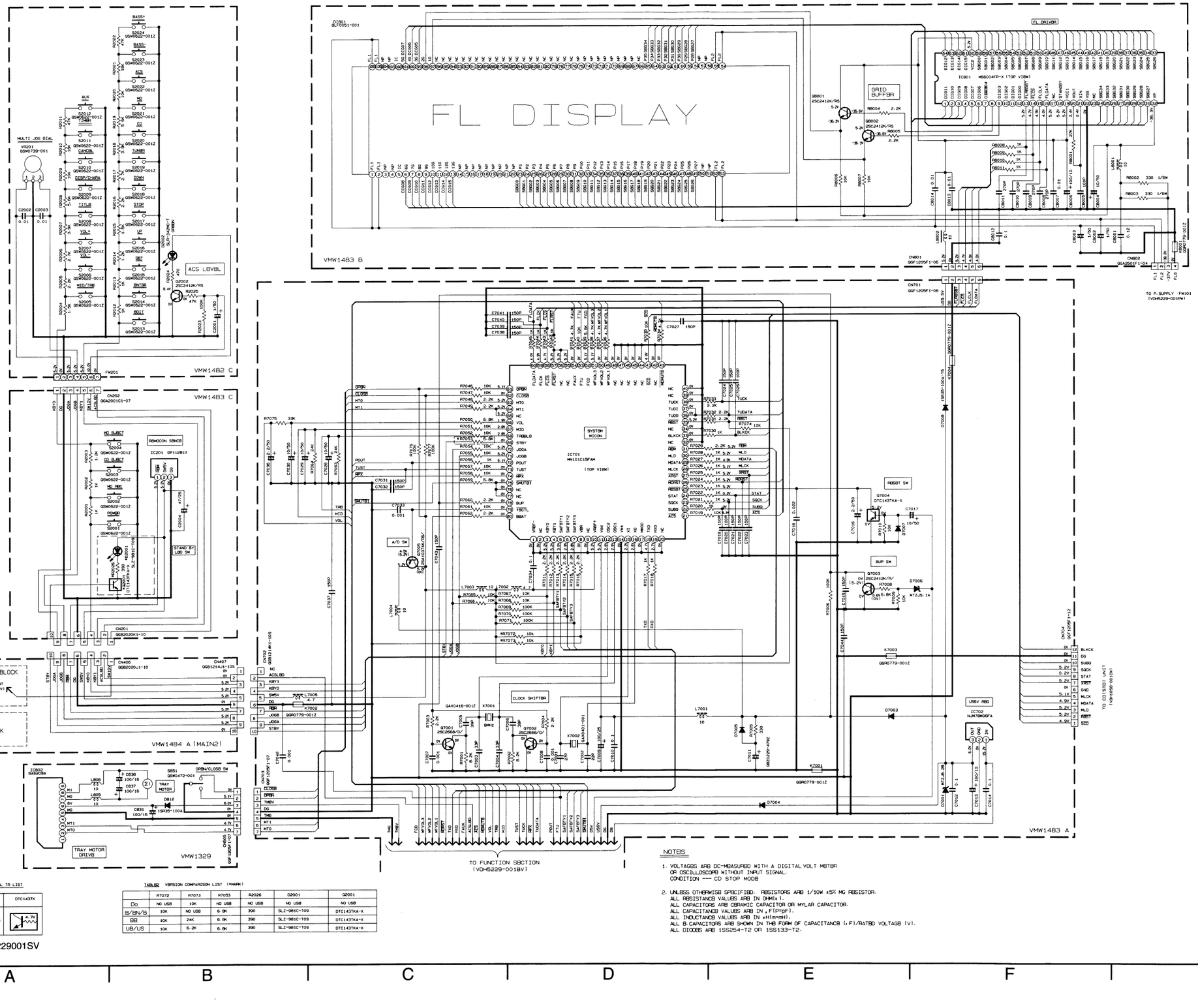


TABLE1 DIGITAL TR LIST

PARTS NAME	DTC143TK
CONSTRUCTION	4.7K

Note : VDH5229001SV

TABLE2 VERSION COMPARISON LIST (*MARK)

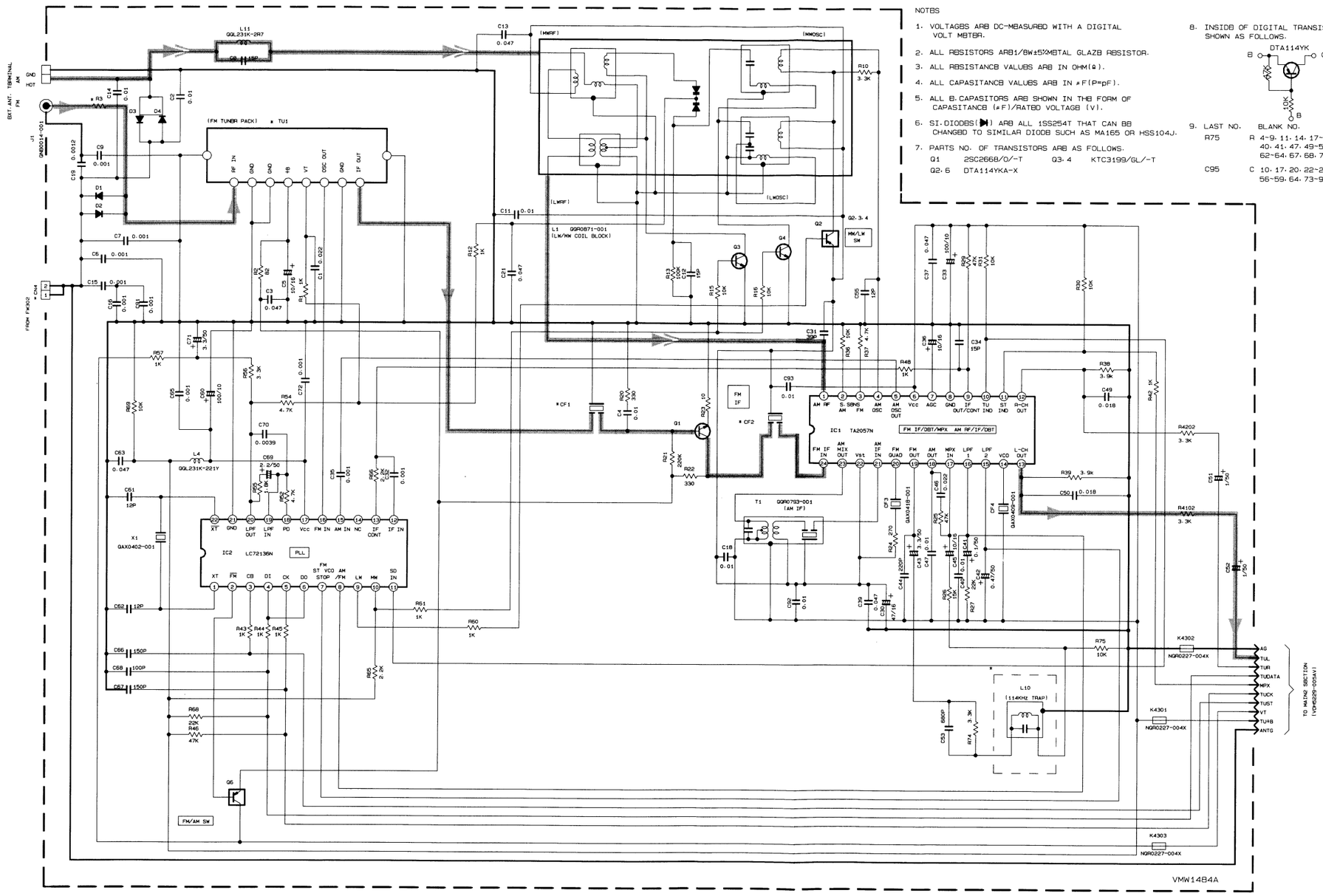
	R7072	R7073	R7053	R2026	Q2001	Q2001
Do	NO USB	10K	NO USB	NO USB	NO USB	NO USB
B/BW/B	10K	NO USB	6.8K	390	SLZ-981C-T09	DTC143TKA-X
BB	10K	24K	6.8K	390	SLZ-981C-T09	DTC143TKA-X
UB/US	10K	6.2K	6.8K	390	SLZ-981C-T09	DTC143TKA-X

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- CD STOP MODE

2. UNLESS OTHERWISE SPECIFIED. RESISTORS ARE 1/10W ±5% MG RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(s).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(=pF).
   ALL INDUCTANCE VALUES ARE IN μH(=mH).
   ALL B.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS254-T2 OR 1SS133-T2.

■ Tuner circuit B/E/EE/EN Version



VERSION COMPARISON LIST (*MARKS)

	TU1	CF1	CF2	R3	L10	CN4
B/E/EN	QAU0034-001	QAX0420-001	QAX0421-001	56	QQR0794-001	QGA2501C1-02
EE	QAU0036-001	QAX0403-001	QAX0403-001	120	BUS WIRE	NON

	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IC1	FM NO SIGNAL	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1	4.4	3.7	3.7	1.4	0	1.3	1.1	2.0	2.0	5.1	2.0
	FM 60dB STEREO	2.0	0.5	0	2.0	5.1	5.1	1.1	0	0.3	0	0	1.1	1.1	4.3	4.1	3.7	1.4	0	1.4	1.1	2.0	2.0	5.1	2.0
	AM NO SIGNAL	2.0	0.5	0	2.0	5.0	5.1	0	0	0.3	5.1	5.1	1.1	1.1	4.5	0.1	0	1.4	1.4	1.5	1.6	2.0	2.0	5.1	2.0
IC2	FM NO SIGNAL	2.4	0	0	5.1	4.9	5.1	3.7	3.7	2.0	3.8	5.1	0	0	0	0	2.6	5.1	1.0	1.0	3.7	0	2.7		

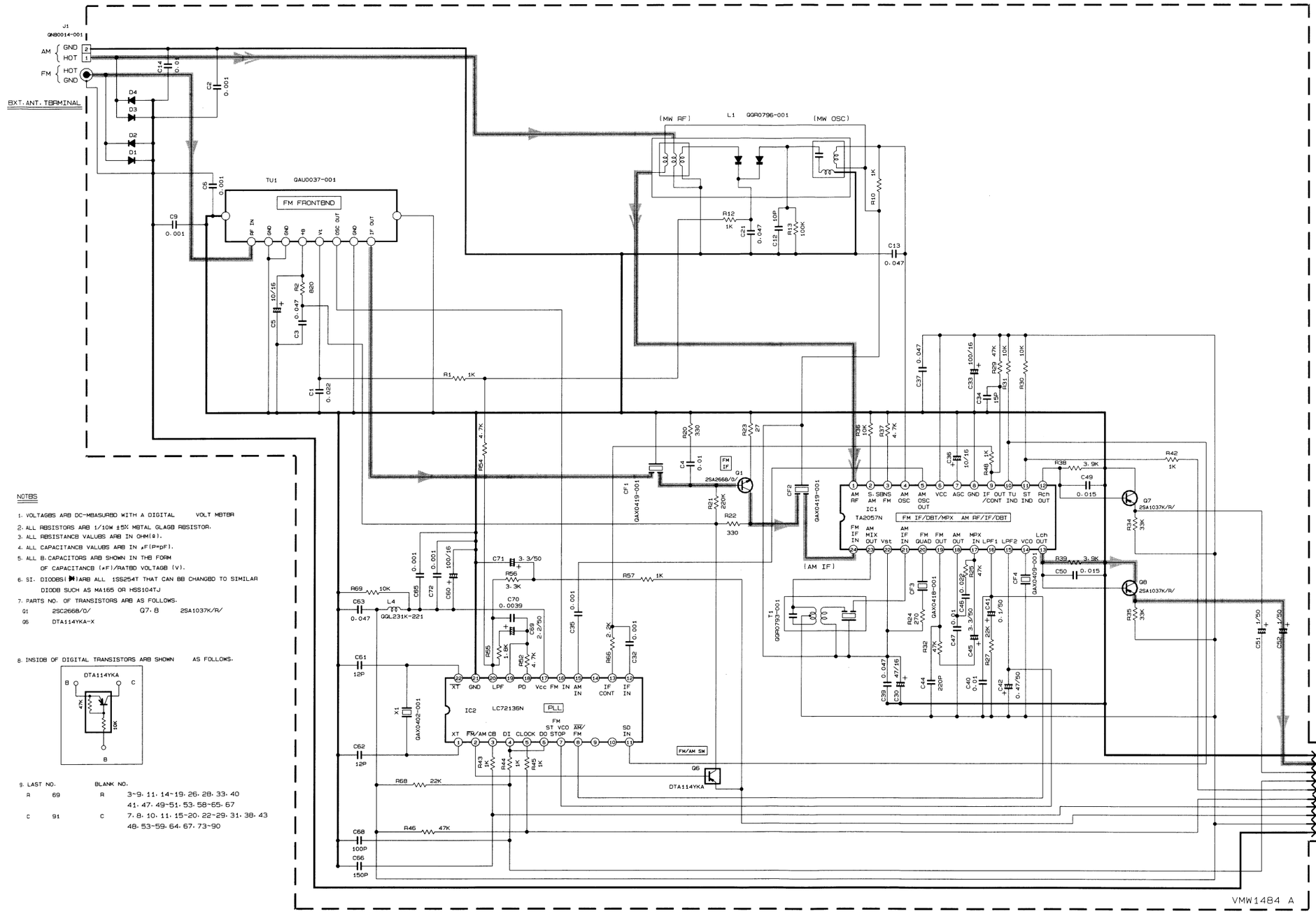
Tr NO.	Q1			Q6		
PIN NO.	B	C	B	B	C	B
FM 87.5MHz NO SIGNAL	0	7.5	0.7	8.8	8.7	0
AM 522KHz NO SIGNAL	0	0	0	8.8	0	8.7

Tr NO.	Q2			Q3			Q4		
PIN NO.	B	C	B	B	C	B	B	C	B
AM 522KHz NO SIGNAL	2.0	2.0	0.1	0	0	0.7	0	0	0.7
AM 144KHz NO SIGNAL	2.0	2.0	2.0	0	0	0.1	0	0	0.1

FM RADIO SIGNAL
AM RADIO SIGNAL

Note : VDH5229005TW

■ Tuner circuit UB/US Version



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
2. ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPACITANCE VALUES ARE IN μF(P=pF).
5. ALL B.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
6. SI. DIODES( )ARE ALL 1SS254T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104TJ
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
   Q1 2SC2668/O/ Q7.8 2SA1037K/R/
   Q6 DTA114YKA-X
8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.

9. LAST NO. BLANK NO.
   R 69 R 3~9. 11. 14~19. 26. 28. 33. 40 41. 47. 49~51. 53. 58~65. 67
   C 91 C 7. 8. 10. 11. 15~20. 22~29. 31. 38. 43 48. 53~59. 64. 67. 73~90

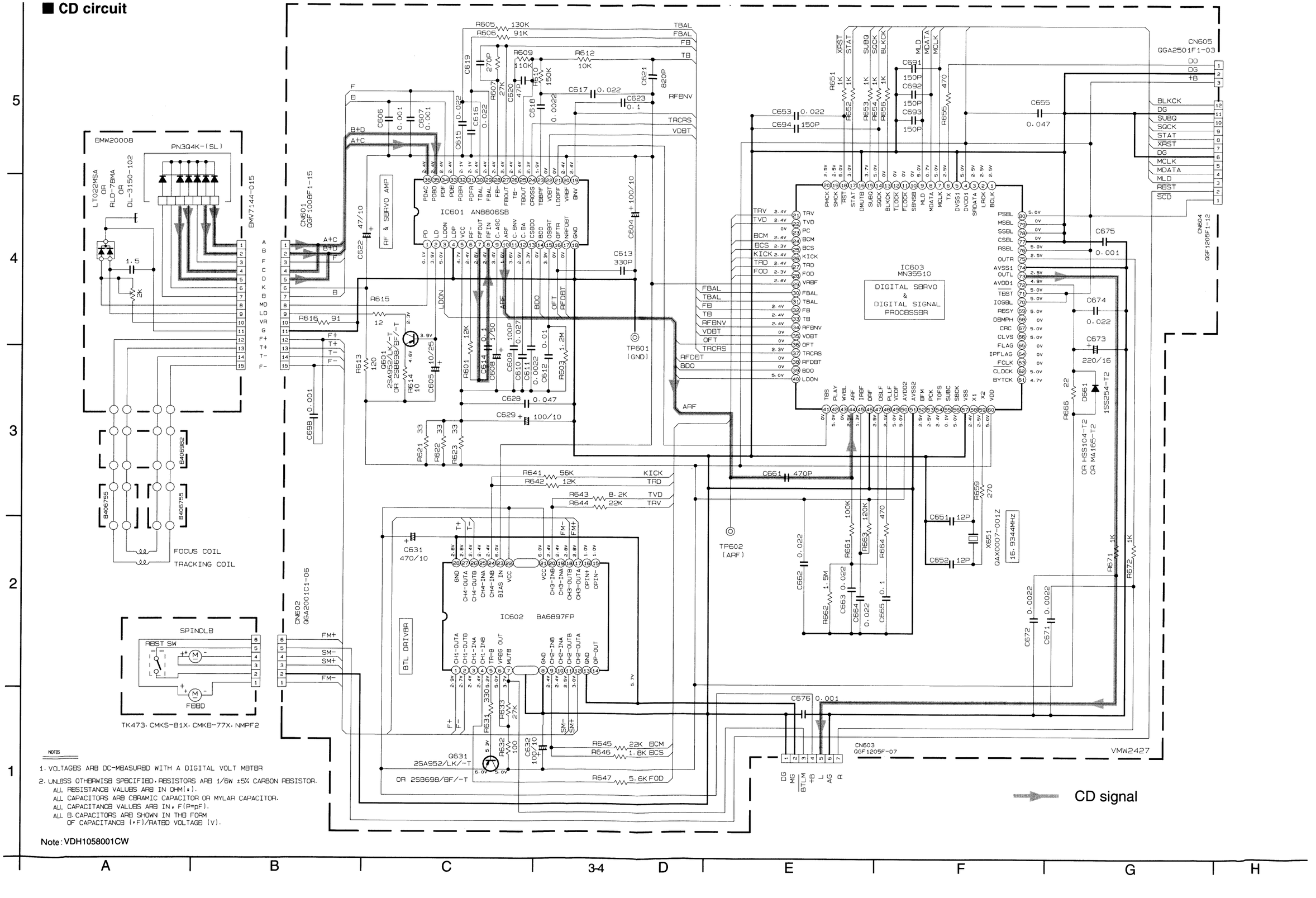
	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IC1	FM NO SIGNAL	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1	4.4	3.7	3.7	1.4	0	1.3	1.1	2.0	2.0	5.1	2.0
	FM 60dB STEREO	2.0	0.5	0	2.0	5.1	5.1	1.1	0	0.3	0	0	1.1	1.1	4.3	4.1	3.7	1.4	0	1.4	1.1	2.0	2.0	5.1	2.0
	AM NO SIGNAL	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1	4.5	0.1	0	1.4	1.4	1.5	1.6	2.0	2.0	5.1	2.0
IC2	FM NO SIGNAL	2.4	0	0	1.1	5.0	1.1	3.7	3.7	0	0	5.1	0	0	0	0	2.6	5.1	1.0	1.0	3.7	0	2.7		

Tr NO.	Q1			Q6			Q7			Q8		
PIN NAME	B	C	B	B	C	B	B	C	B	B	C	B
FM 76MHz	0	7.5	0.7	8.8	8.8	0	1.6	0	1.1	1.6	0	1.1
AM 531kHz	0	0	0	8.8	0	8.7	1.6	0	1.1	1.6	0	1.1

FM RADIO SIGNAL
AM RADIO SIGNAL

Note : VDH5229007TW

■ CD circuit

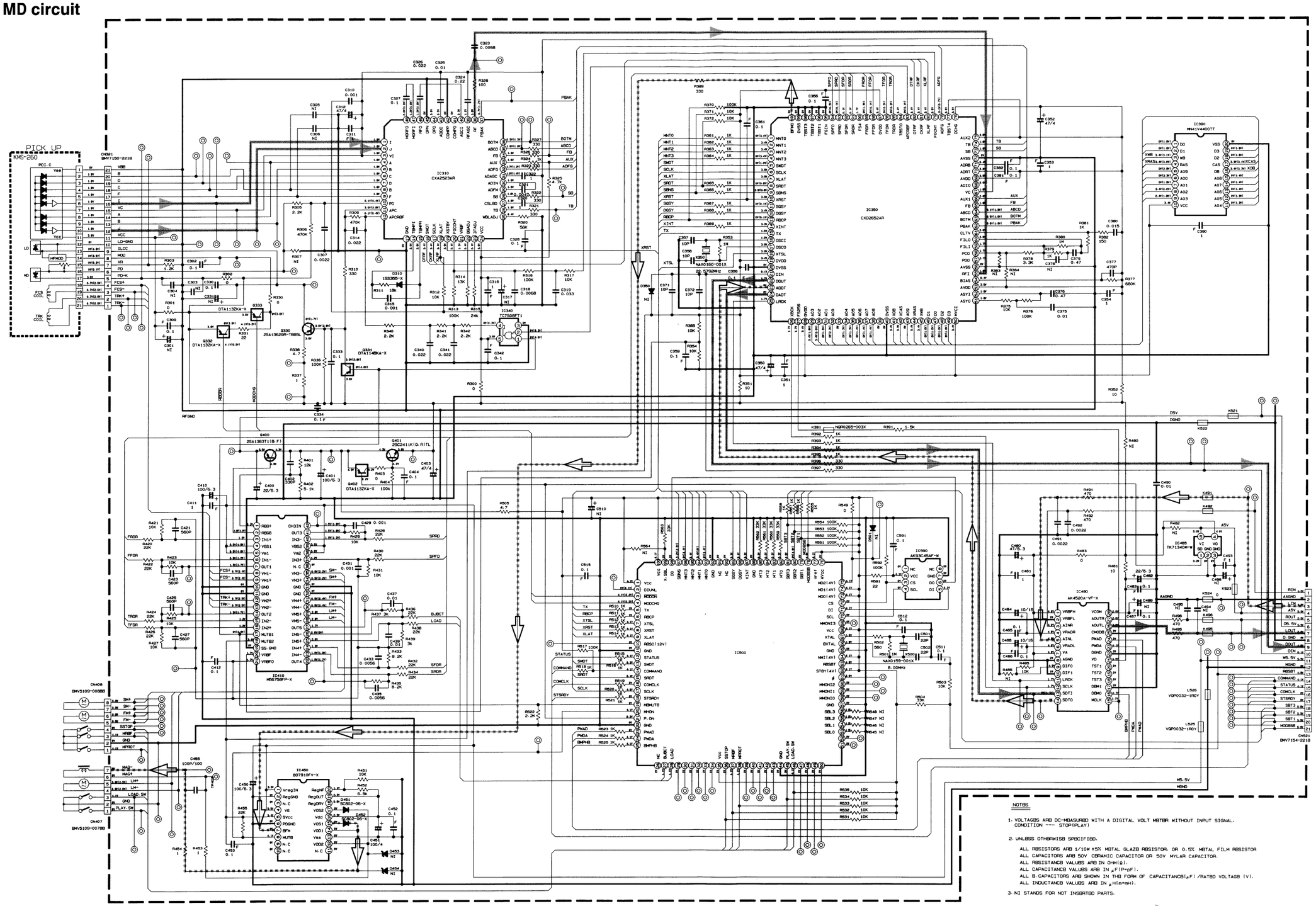


NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN, F(P=pF).
   ALL B. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

Note : VDH1058001CW

■ MD circuit

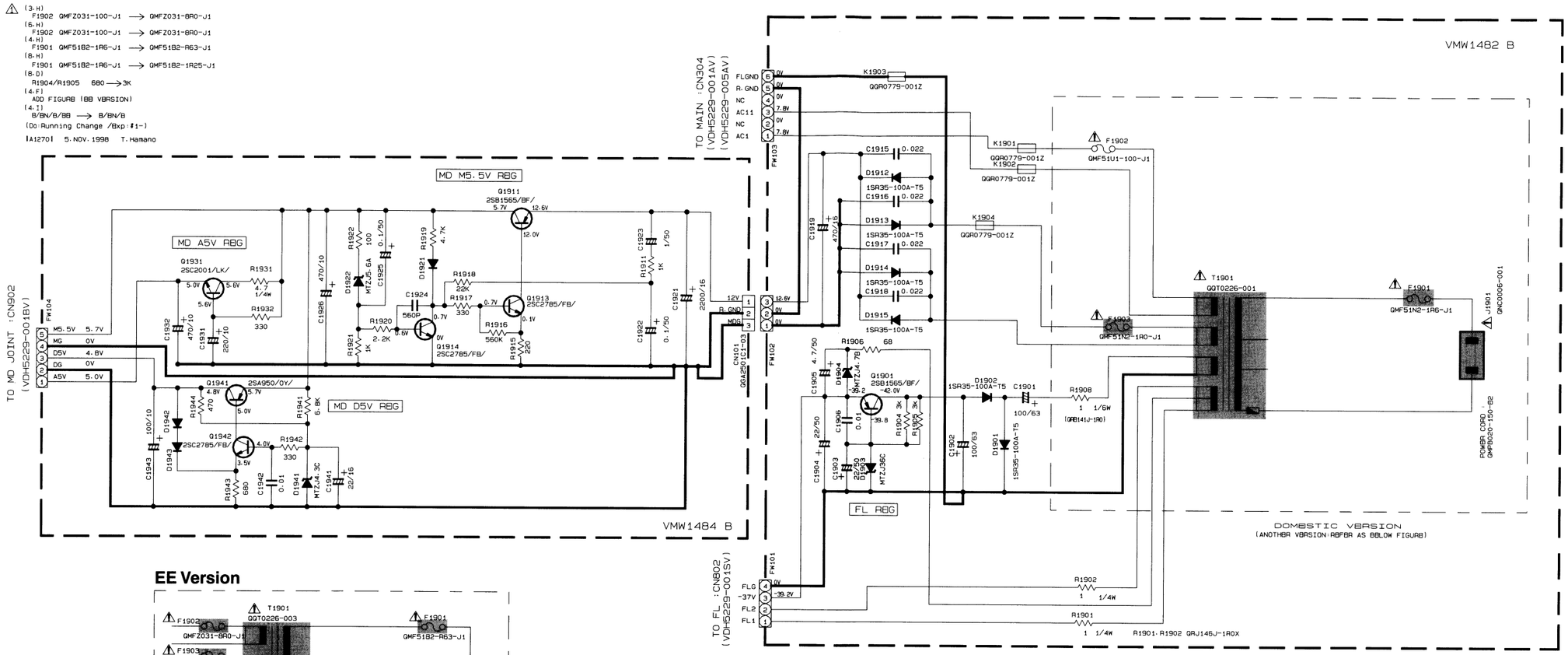


Note : E911258

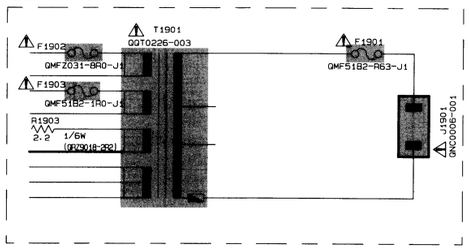
IC500	
~#11724	HD64F3048VF8-01
#11725~	HD6433045SV06F

■ Power supply circuit

⚠ (3.H)
F1902 QMFZ031-100-J1 → QMFZ031-8R0-J1
(6.H)
F1902 QMFZ031-100-J1 → QMFZ031-8R0-J1
(4.H)
F1901 QMF51B2-1R6-J1 → QMF51B2-R63-J1
(8.H)
F1901 QMF51B2-1R6-J1 → QMF51B2-1R25-J1
(8.D)
R1904/R1905 680 → 3K
(4.F)
ADD FIGURE (BB VERSION)
(4.I)
B/BN/B/BB → B/BN/B
(Do Running Change /Exp:#1-)
A1270I 5.NOV.1998 T.Hamano

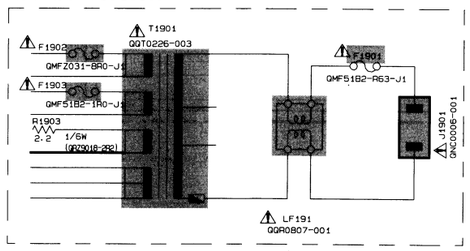


EE Version



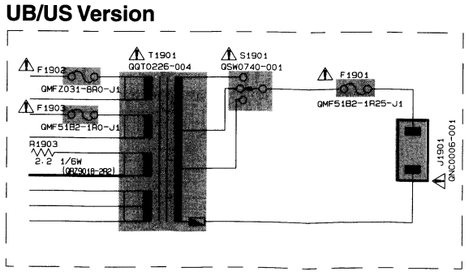
AC230V/50HZ
POWER CORD : QMP39F0-183

E/EN/B Version



AC230V/50HZ
POWER CORD :
QMP39F0-183 (B/BN)
QMP5520-183B(B)

UB/US Version



AC110/127/230V 50/60HZ
POWER CORD :
QMPP060-183-JD (UB)
QMP39F0-183 (US)

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION ---CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL B.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS254-T2 OR 1SS133-T2

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

Note : VDH5229001PW

■ Amp. circuit 1/2

△ (N-5) CHANGE TABLE 2
(B-19) K5381 : GGR0779-001Z → K5382 : NGR0227-004X
(F-15) ADD C5384
(F-14) ADD C5385
(F-16) ADD C5386
(G-6) ADD C5387
(D-19) C5185/C5285 → C5186/C5286
(Do : #301- / Bxp : MP#1-)
(A15071 5.NOV.1998 T.Hamano

FUNCTION AMP
HIGH CONTROL AMP
HEAD PHONE AMP
VOL&MID/TRB
AUX MUTING DRIVE
ACS LED DRIVER
ACS DET DRIVER
HP MUTING DRIVE
MD MUTING DRIVE

VMW1484 C
VMW1483 A

TO CD(STD) UNIT (VDH1058-001CW)
TO BMU-4018 UNIT (BM11-258)
TO POWER SUPPLY-FM104 (VDH5229-001PW)
TO MAIN-CN302 (VDH5229-001AV) (VDH5229-005AV)
TO MAIN-CN303 (VDH5229-001AV) (VDH5229-005AV)
TO MICOM SECTION (VDH5229-001SV)
TO MAIN-CN01 (VDH5229-001AV) (VDH5229-005AV)

TABLE1 DIGITAL TR LIST

PARTS NAME	DTC114EKA	DTA114EKA
	10K 10K	10K 10K

TABLE2 VERSION COMPARISON LIST (*MARKS)

	R5117/R5217	C5109/C5209	C5110/C5210	L5181/L5281	C5185/C5286	C5384/C5385	C5386	C5387	C5175/C5275	R5105/R5205	R5381/R5382/R5384
B/S/BN	1K	150P	150P	47	0.01	150P	0.01	150P	100P	12K	220
BB	SHORT	NO USE	NO USE	SHORT	NO USE	NO USE	NO USE	NO USE	NO USE	12K	220
US/UB	SHORT	NO USE	NO USE	SHORT	NO USE	NO USE	NO USE	NO USE	NO USE	18K	220
Do	SHORT	NO USE	NO USE	SHORT	NO USE	NO USE	NO USE	NO USE	NO USE	18K	180

NOTES
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CONDITION ---- CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED. RESISTORS ARE 1/10W ±5% MG RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω)
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN ×F(MFD)
ALL INDUCTANCE VALUES ARE IN ×H(MH)
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (×F)/RATED VOLTAGE (V)
ALL DIODES ARE 1SS254-T2 OR 1SS133-T2

RECRDING SIGNAL
PLAYBACK SIGNAL

Note : VDH5229001BV

■ Amp. circuit 2/2 B/E/EE/EN Version

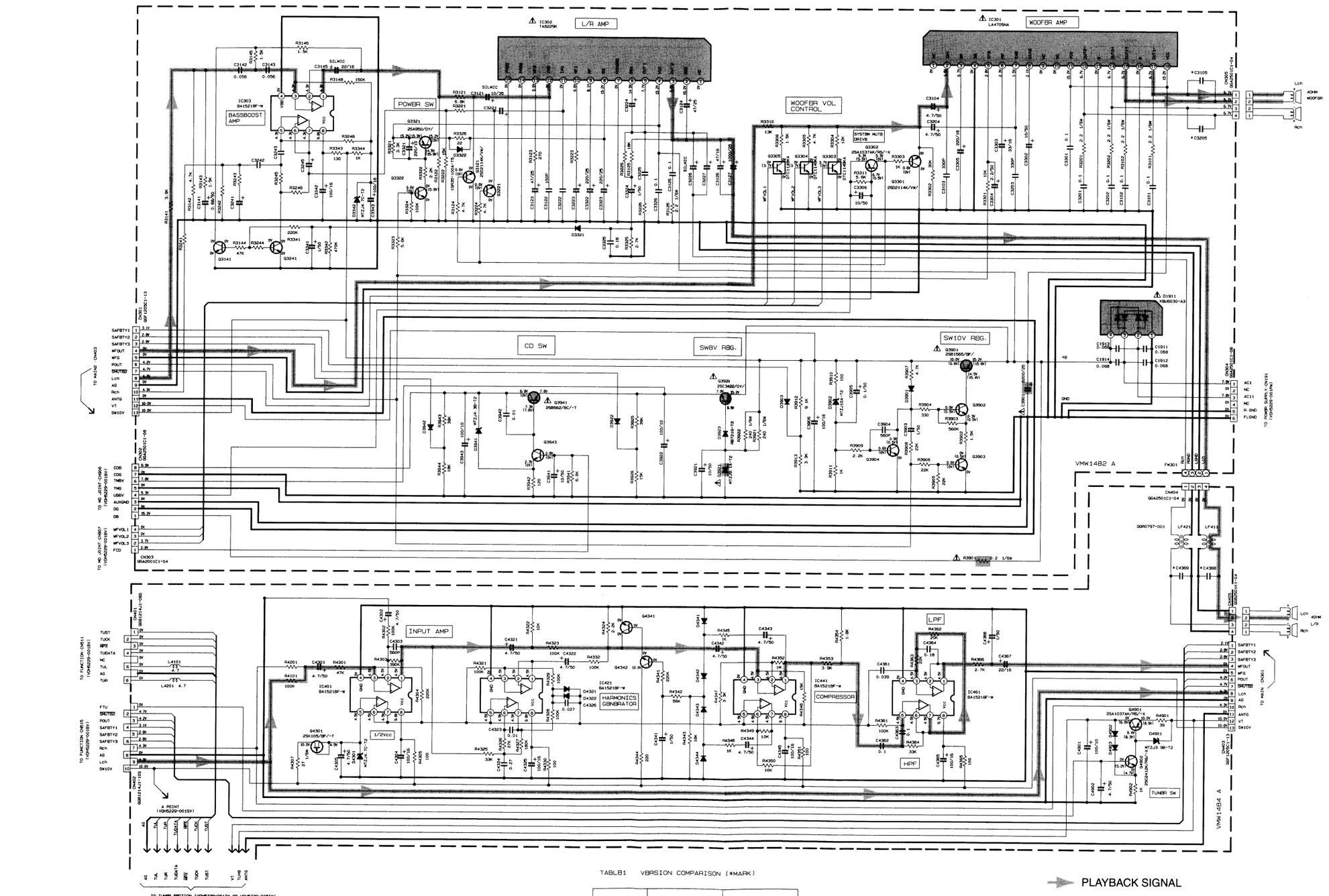


TABLE1 DIGITAL TRANSISTOR

PARTS NAME	DTC114EKA
CONSTRUCTION	10K

NOTES:
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION — CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/10W ±5% MG RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN μF(P=pF).

ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL B-CAPACITORS ARE SHOWN IN THIS FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254-T2(OR 1SS133-T2)
ALL NPN TRANSISTORS ARE 2SC2412K/RS/

TABLE1 VERSION COMPARISON (*MARK)

	C3105/C3205	C4368/C4369
B/E/EN	0.0033	0.01
BB	NO USE	NO USE

Note : VDH5229005AV

■ Amp. circuit 2/2 UB/US Version

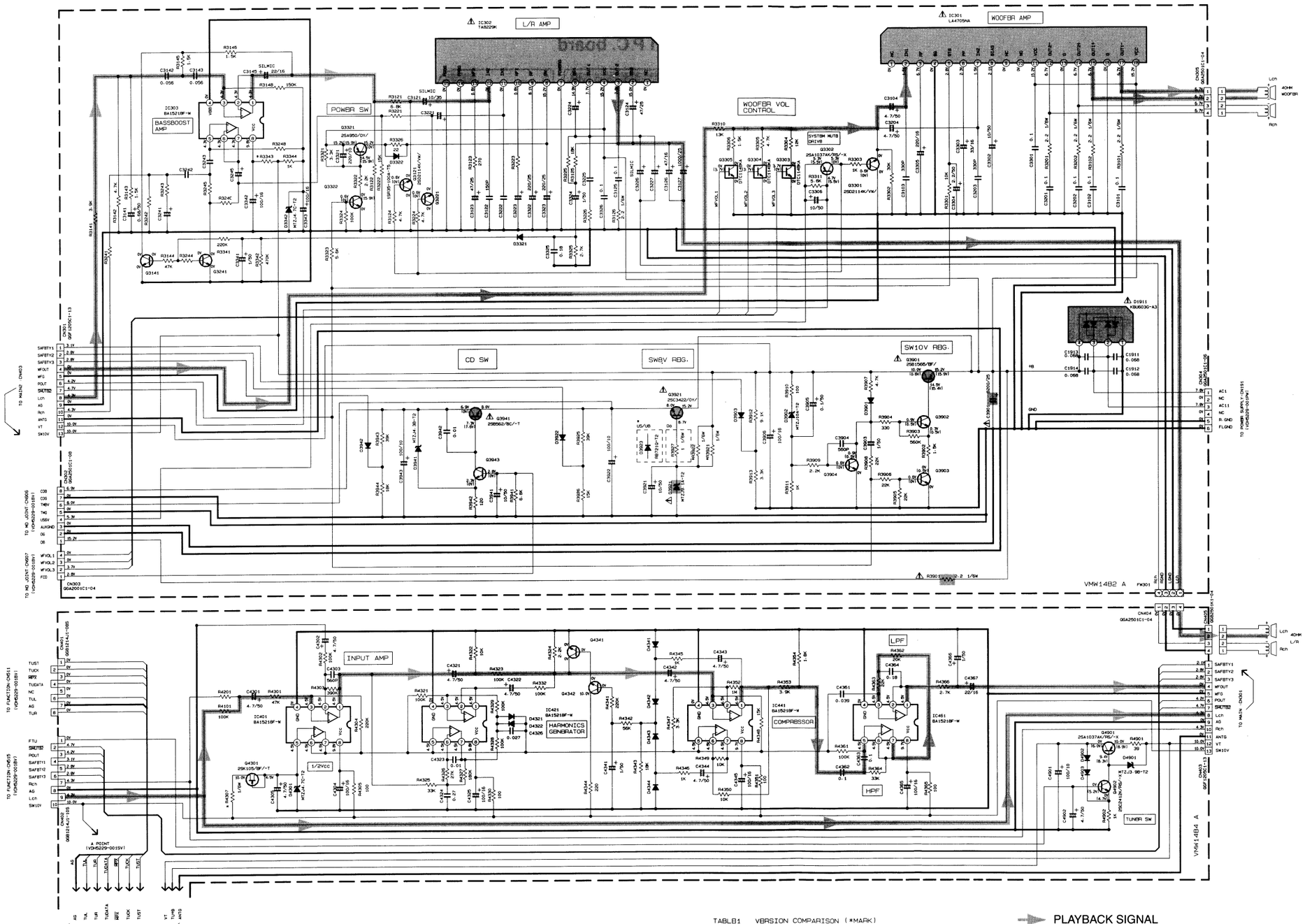


TABLE1 DIGITAL TRANSISTOR

PARTS NAME	DTC114EKA
CONSTRUCTION	10K / 10K

NOTE
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION ---- CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/10W ±5% MG RESISTOR ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN μF(P=pF).

ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL B CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254-T2(OR 1SS133-T2)
ALL NPN TRANSISTORS ARE 2SC2412K/RS/

TABLE1 VERSION COMPARISON (*MARK)

	R3343	R4307	R3921	R3922	R3927	D3923
Do	100	1	160	160	1	NO USE
US/UB	130	27	240	240	NO USE	RB721Q-T2

PLAYBACK SIGNAL

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

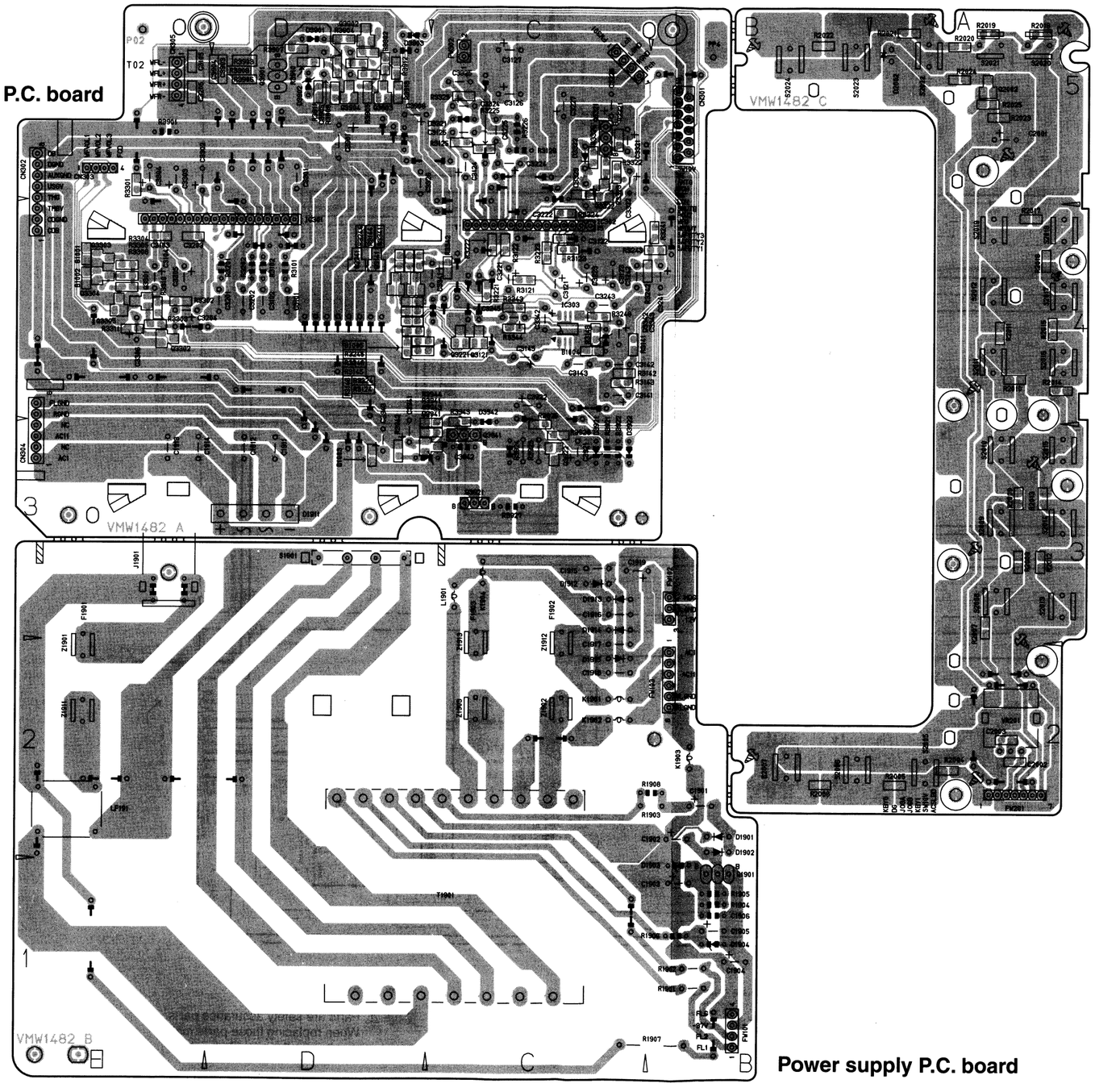
Note : VDH5229001AV

Printed Circuit Boards

■Controller P.C. board [0] [2]

Switch P.C. board

Power amplifier P.C. board

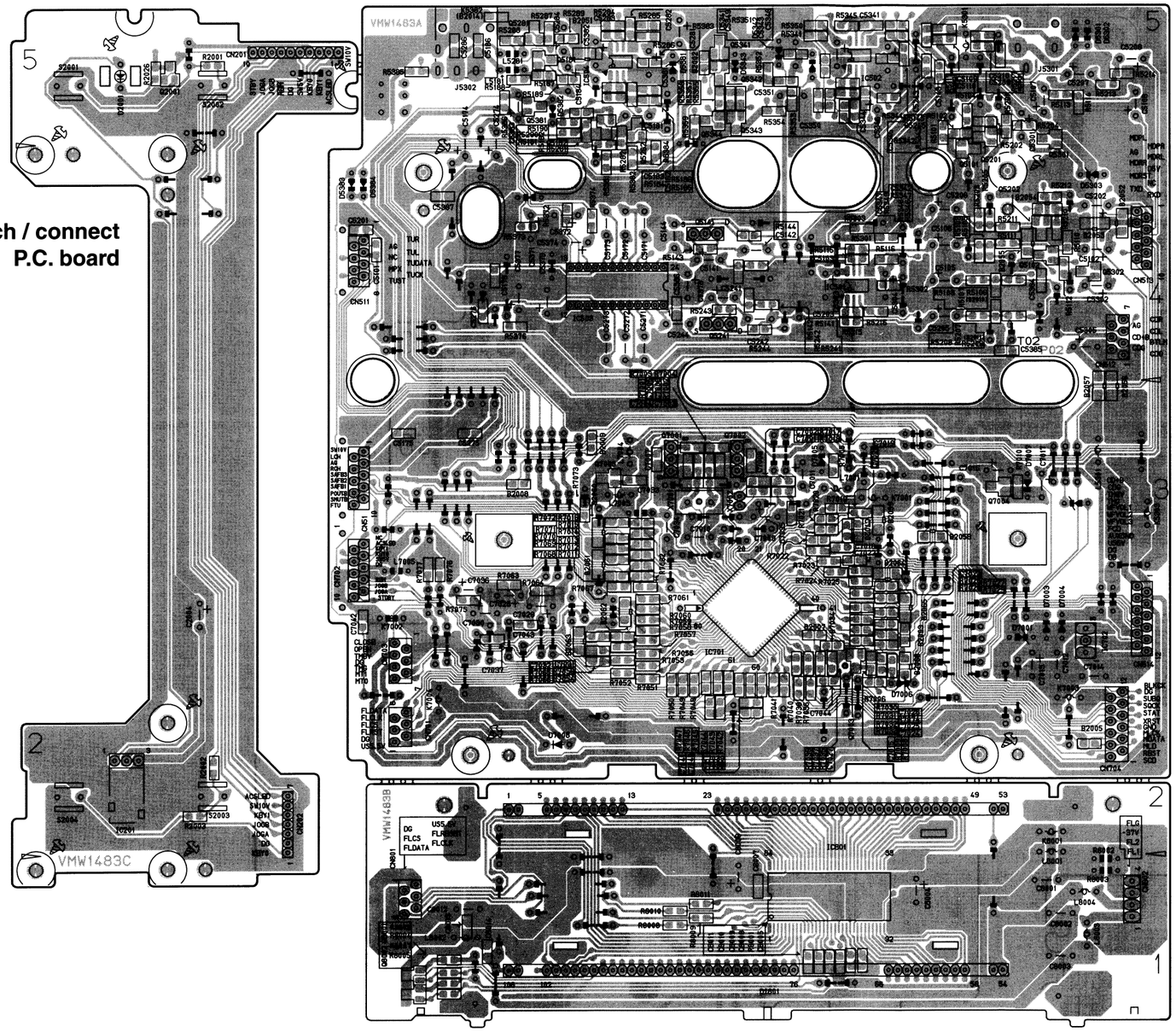


Power supply P.C. board

■**Main P.C. board** 0 1

Amplifier / Microprocessor P.C. board

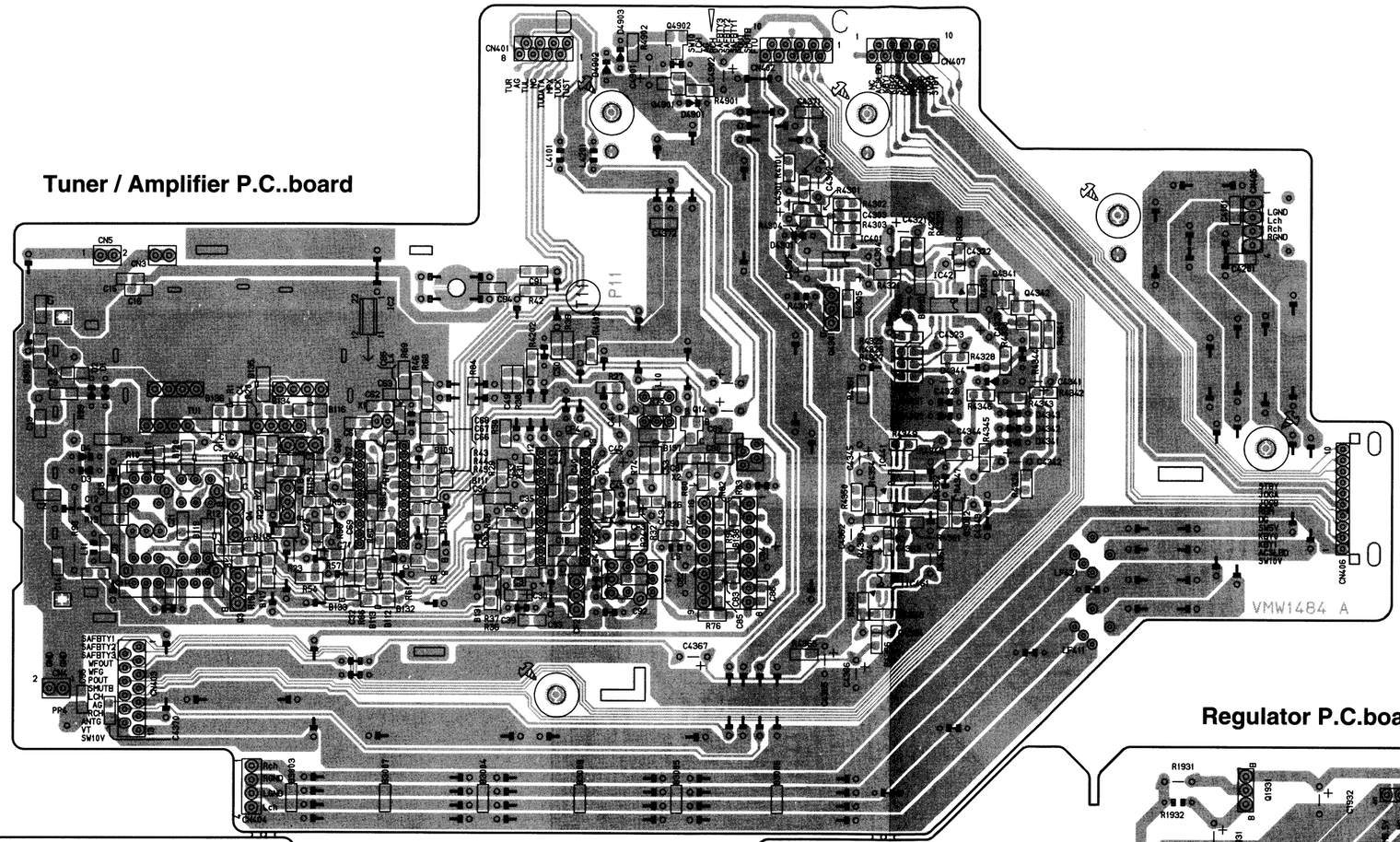
Switch / connect P.C. board



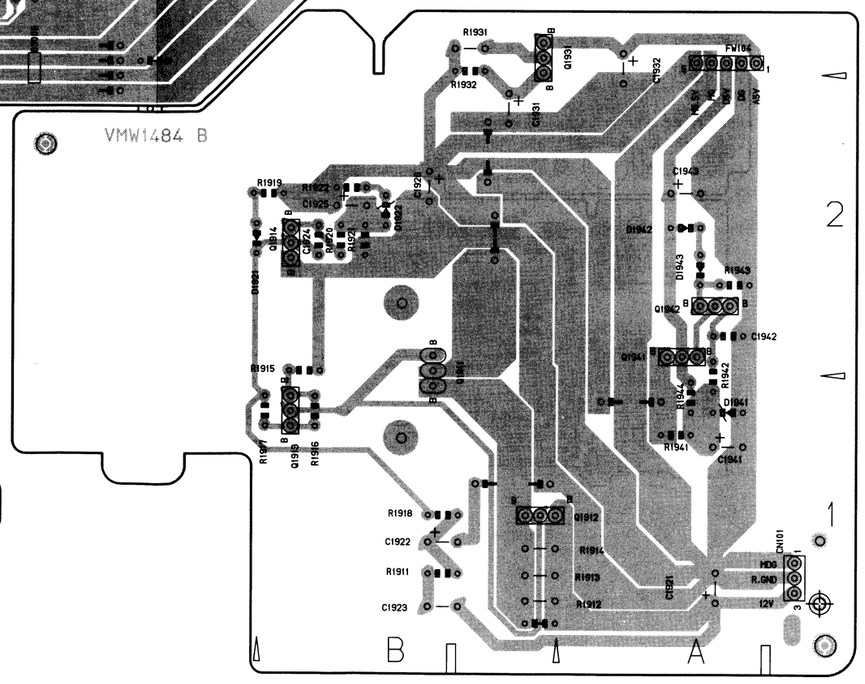
Display P.C. board

■Tuner P.C.board [0] [3] B/E/EN/EE version

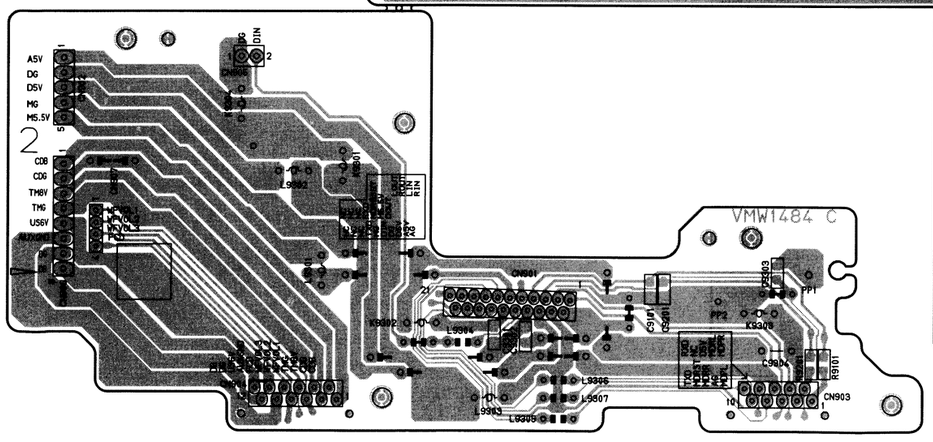
Tuner / Amplifier P.C..board



Regulator P.C.board

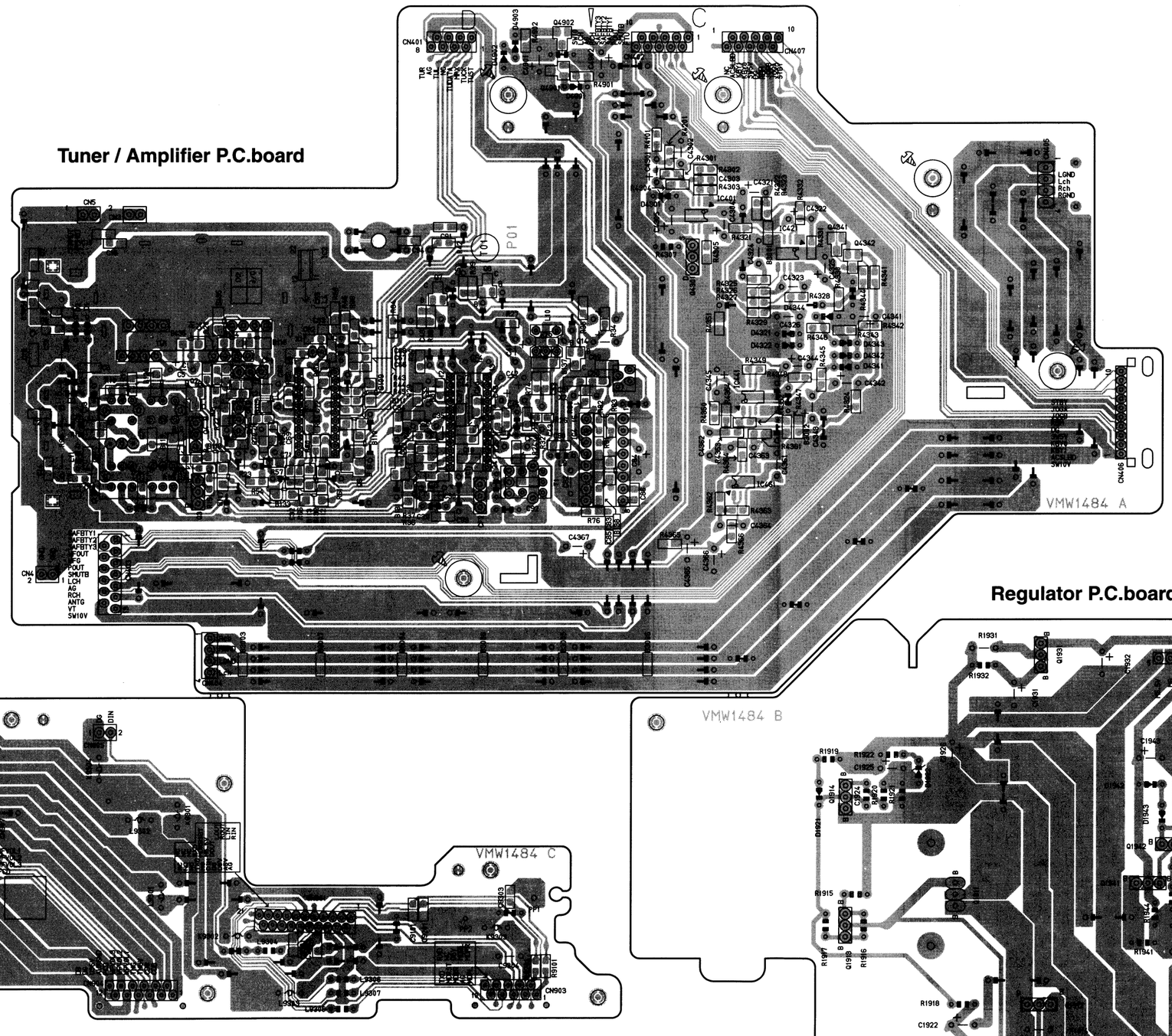


Connect (Jump) P.C.board



■Tuner P.C.board [0] [4] US/UB version

Tuner / Amplifier P.C.board

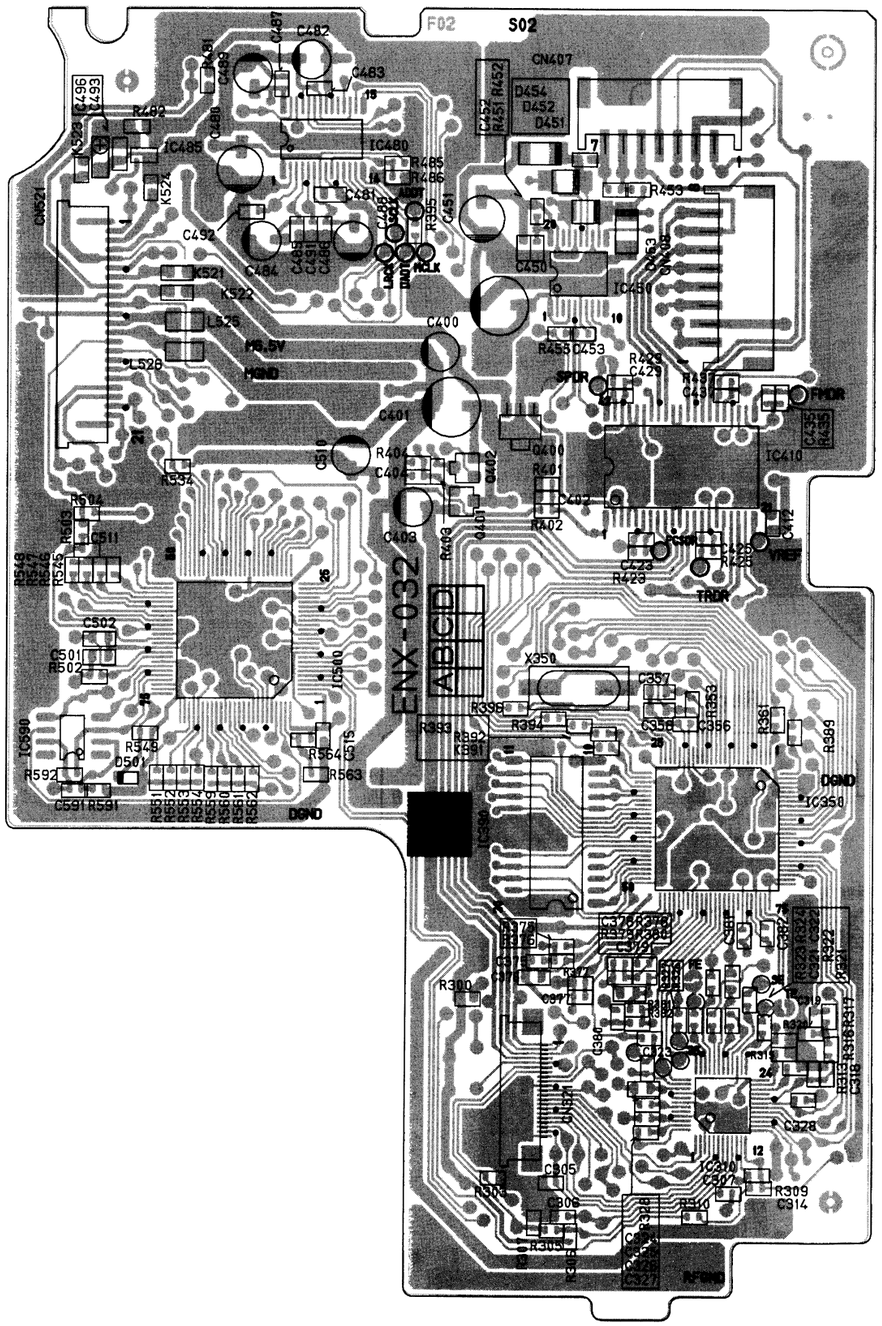


Regulator P.C.board

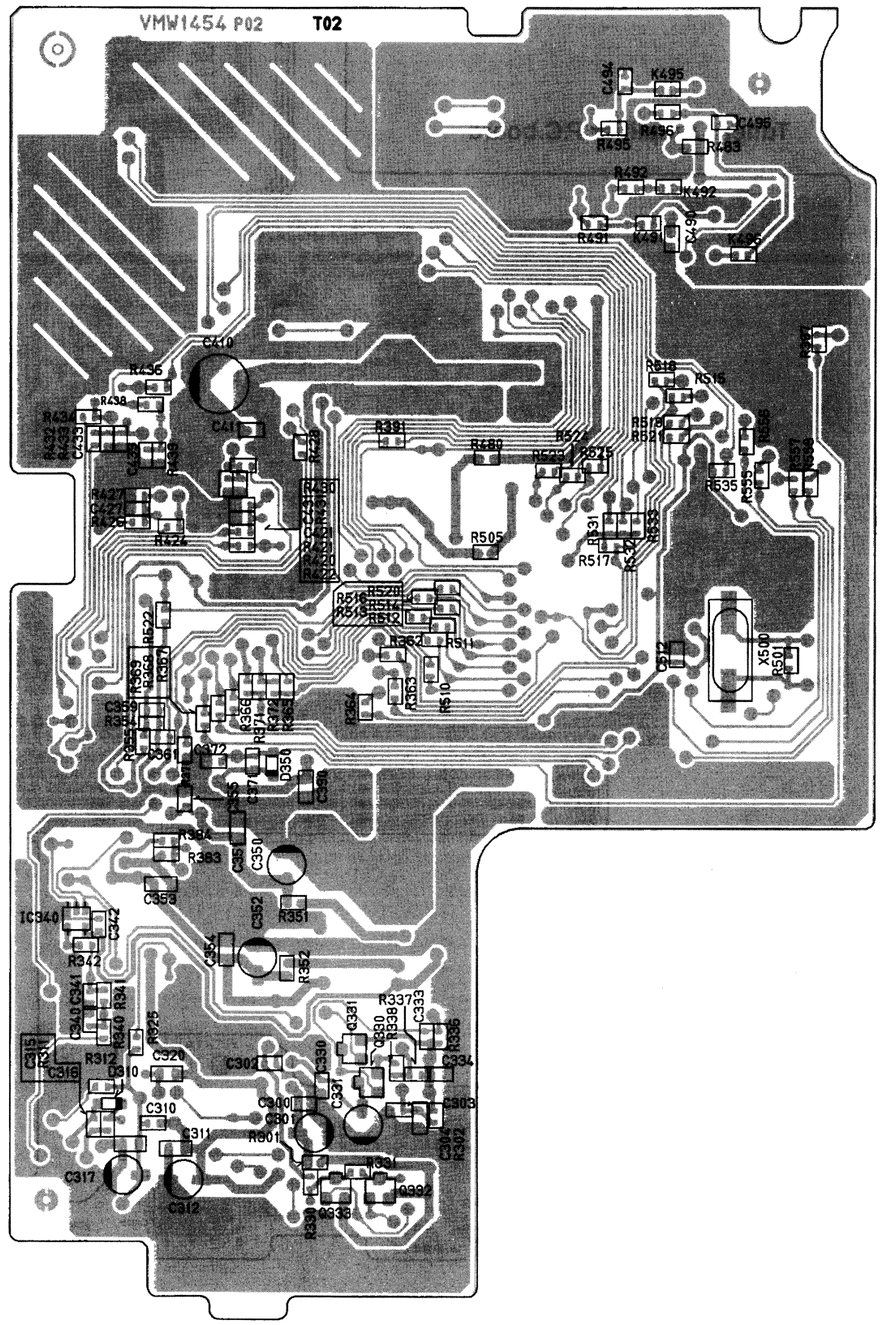
Connect (Jumper) P.C.board

■MD Servo P.C. Board [0] [7]

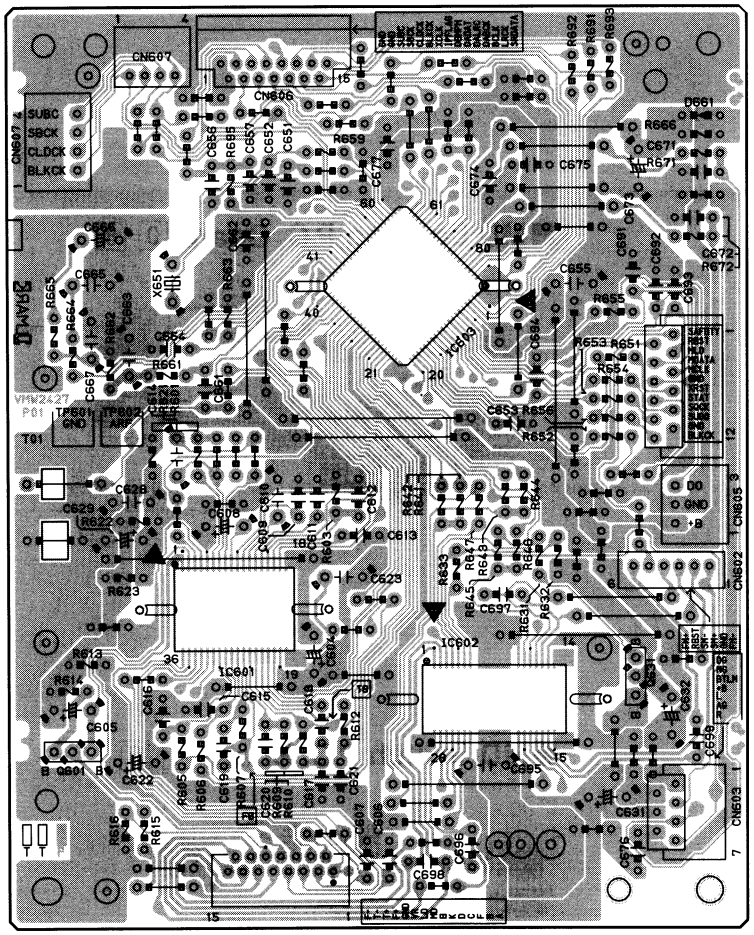
(Parts Side)



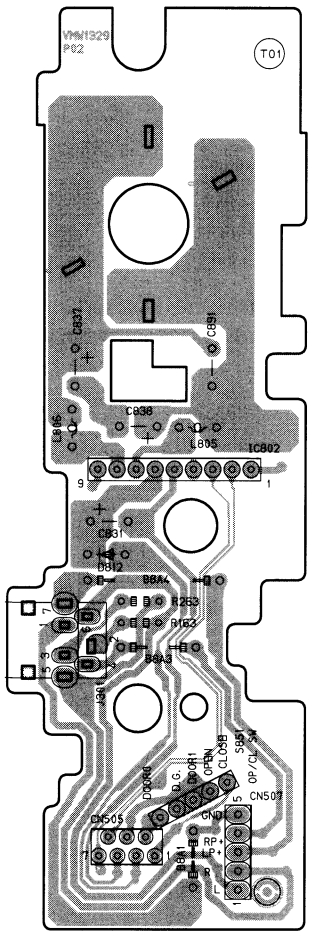
(Solder Side)



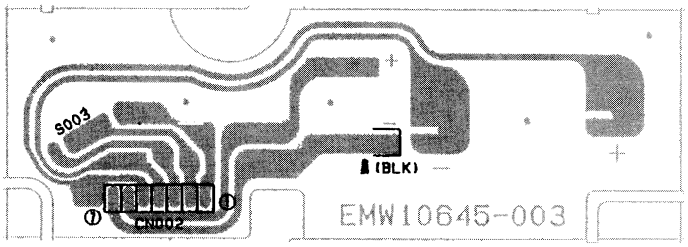
■CD Amp. board [0] [5]



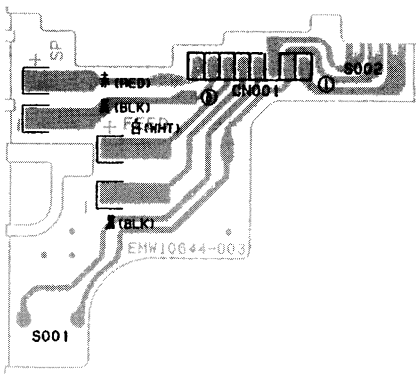
■CD Loading P.C. Board 0 6



■MD Loading P.C. Board 0 8



■MD Switch P.C. Board 0 9



PARTS LIST

[RD-MD5]

* All printed circuit boards and its assemblies are not available as service parts.

Areas Suffix

B ---------- U.K.
E ---------- Continental Europe
EN ---------- Northern Europe
EE --------- Russian Federation
UB ---------- Hong Kong
US ---------- Singapore
No marks indicates all areas.

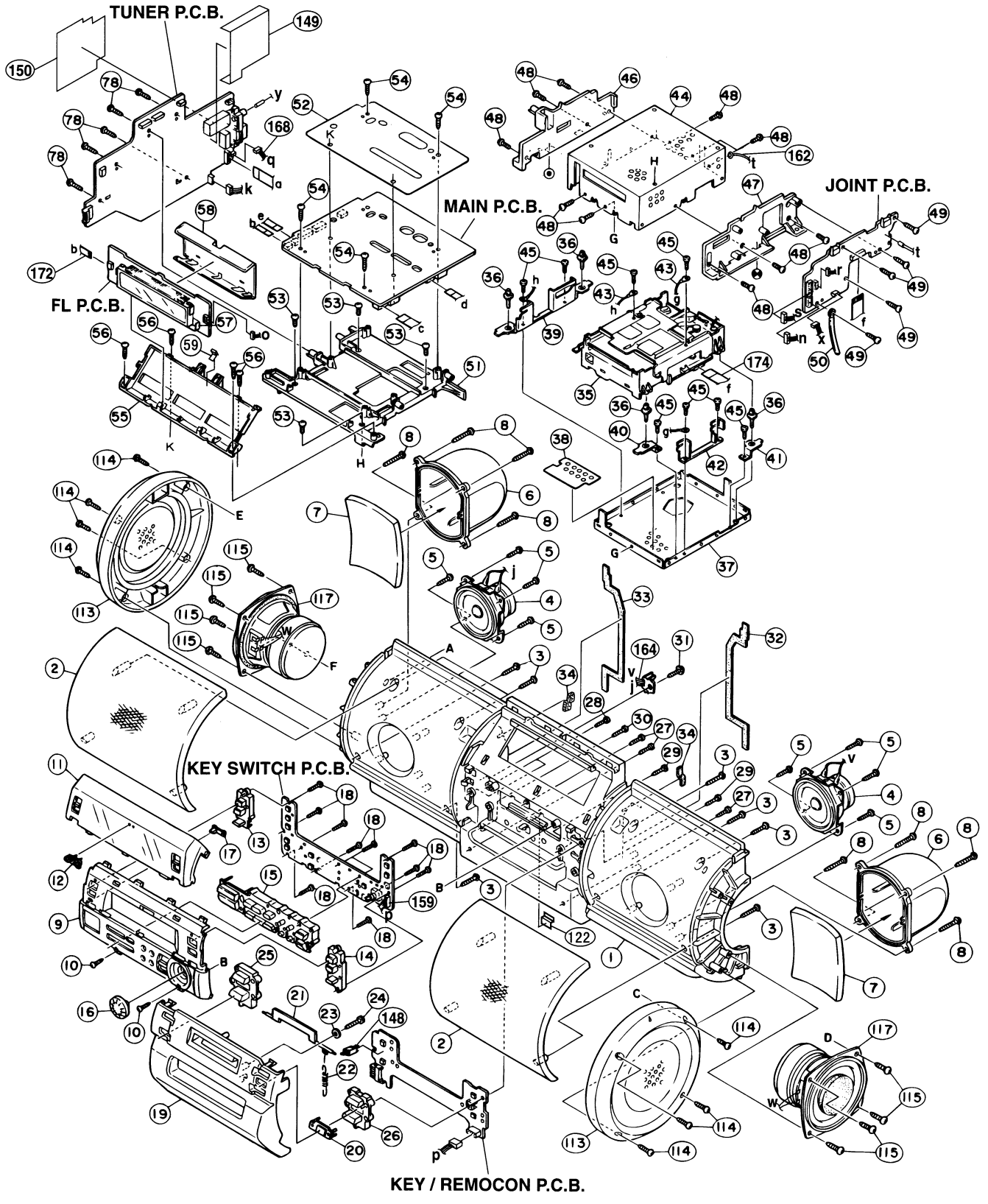
- Contents -

Exploded View and Parts List 4-2
General Section 4-2
MD Mechanism Section 4-6
CD Mechanism Section 4-8
Electrical Parts List 4-9
Packing Materials and Accessories Parts List 4-26

Exploded View and Parts List

■General Section 1

Block No. M 1 M M



■Parts List(General Section 1)

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	LV10093-001A	FRONT CABINET	MIPS	1		
	2	LV20161-001A	SP NET ASSY		2		
	3	QYSBSF3010Z	SCREW	FRONT+SP NET	8		
	4	LE10007-004A	SPEAKER	7CM FULL	2		
	5	QYSBSF3010Z	SCREW	FOR SPEAKER	8		
	6	LV20168-001A	CAP	PP	2		
	7	LV40436-001A	SOUND ABSOBER	IN CAP	2		
	8	QYSBSF3010Z	SCREW	FOR CAP	8		
	9	LV10095-002A	FUNCTION COVER	MIPS	1		
	10	QYSBSF3010Z	SCREW	FUNC.COVER+FRON	2		
	11	LV10096-001A	FL LENS	PMMA	1		
	12	PQ45130-7	JVC MARK		1		
	13	LV30518-001A	S.VOL.BUTTON	ABS	1		
	14	LV30519-001A	VOL.BUTTON	ABS	1		
	15	LV20169-001A	FUNCTION BUTTON	ABS PAD X2	1		
	16	LV40437-001A	JOG DIAL	ABS	1		
	17	LV40438-001A	ACS LENS	ON PWB	1		
	18	QYSBSF2610Z	SCREW	PWB+FUN.COVER	11		
	19	LV10097-002A	FRONT COVER	MIPS	1		
	20	LV40439-001A	REMOTE LENS	ABS	1		
	21	VJT3400-002	LID	ABS	1		
	22	VKW5318-001	LID SPRING	SUS	1		
	23	VYSS201-019	SPACER		1		
	24	QYSDSF2612Z	SCREW		1		
	25	LV30548-002A	POWER BUTTON	ABS SILK X2	1		
	26	LV30549-001A	EJECT BUTTON	ABS SILK X1	1		
	27	QYSDSF2612Z	SCREW	COVER+CABI	3		
	28	QYSDSF2612Z	SCREW	FOR P.BUTTON	2		
	29	QYSDSF2612Z	SCREW	FOR EJECT BTN	2		
	30	QYSDSF2612Z	SCREW	PWB+CABI+F.COVE	1		
	31	QYSBSFG3010Z	TAP SCREW	FOR SP CONNECTO	1		
	32	LV40443-001A	PACKING SHEET L	PEFU	1		
	33	LV40444-001A	PACKING SHEET R	PEFU	1		
	34	VYSH102-090	SPACER		2		
	35	----------	MD MECHA UNIT		1		
	36	E406294-003	C.D INSULATOR		4		
	37	VYH3931-003	MD BASE	EGC T1.2	1		
	38	VYH8173-001	SPACER		1		
	39	VYH8074-001MM	BASE BRACKET 1		1		
	40	VYH8071-001MM	BASE BRACKET		1		
	41	VYH8072-001MM	BASE BRACKET 3		1		
	42	VYH8073-002	SIDE BRACKET		1		
	43	QUB220-08DMDM	WIRE WITH LAG	FOR MD EARTH	2		
	44	VYH2317-004	MD COVER		1		
	45	QYSDST3004M	SCREW	BKT.+CHSSIS+LAG	8		
	46	LV30520-001A	MD SUPPORT 1	MIPS	1		
	47	LV30521-001A	MD SUPPORT 2	MIPS	1		
	48	QYSBST3006Z	TH TAP SCREW	FOR MD COVER	11		
	49	QYSBSF3010Z	SCREW	J.PWB+MD.SUP+CH	5		
	50	VKZ4001-111S	WIRE CLAMP		1		
	51	LV10098-001A	MD CHASSIS	MIPS	1		
	52	LV30723-001A	COVER	FOR MD CHASSIS	1		
	53	QYSBST3006Z	TH TAP SCREW	FOR MD CHASSIS	4		
	54	QYSBSF3010Z	SCREW	FOR MAIN PWB	4		
	55	LV20177-001A	FL PWB HOLDER	MIPS	1		

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	56	QYSBSF3010Z	SCREW	FL P.HOL.+MD CH	4		
	57	LV30523-001A	FL HOLDER	SPTE T0.5	1		
	58	LV30722-001A	SHIELD	FOR FL PWB	1		
	59	VYSA1R3-035	SPACER	FOR FL PWB HOLD	1		
	78	QYSBSF3010Z	SCREW	FOR TUNER PWB	5		
	113	LV20172-001A	SIDE PROTECT AS		2		
	114	QYSBSF3010N	TAP SCREW		8		
	115	QYSBSF4010Z	SCREW	FOR WF UNIT	8		
	117	VGS1001-040	SPEAKER		2		
	122	VYSA1R6-070	SPACER	FOR FRONT CABI	1		
	148	LV40442-001A	LED HOLDER	ON PWB(STANDBY)	1		
	149	LV30980-001A	SHIELD CASE	FOR TUNER PWB	1	B,E,EN	
	150	LV40835-002A	TUNER SHIELD	FOR TUNER PWB	1	B,E,EN	
	159	QJK006-071302	SIN CR C-B WIRE	KEY-KEY	1		
	162	QUB220-09DMBX	SIN CR C-B WIRE	MD UNIT-JOINT	1		
	164	WJJ0034-003A	WIRE&TUBE	SPEAKER WIRE	1		
	168	QJK007-021702	SIN CR C-B WIRE	AMP-TUNER	1	B,E,EN	
	172	QUQ412-0608CJ	CARD WIRE	FL PWB-MAIN	1		
	174	QUQ110-2107AJ	CARD WIRE	MD MECHA-MD JOI	1		

■Parts List(General Section 2)

BLOCK NO. M2MM□□□□

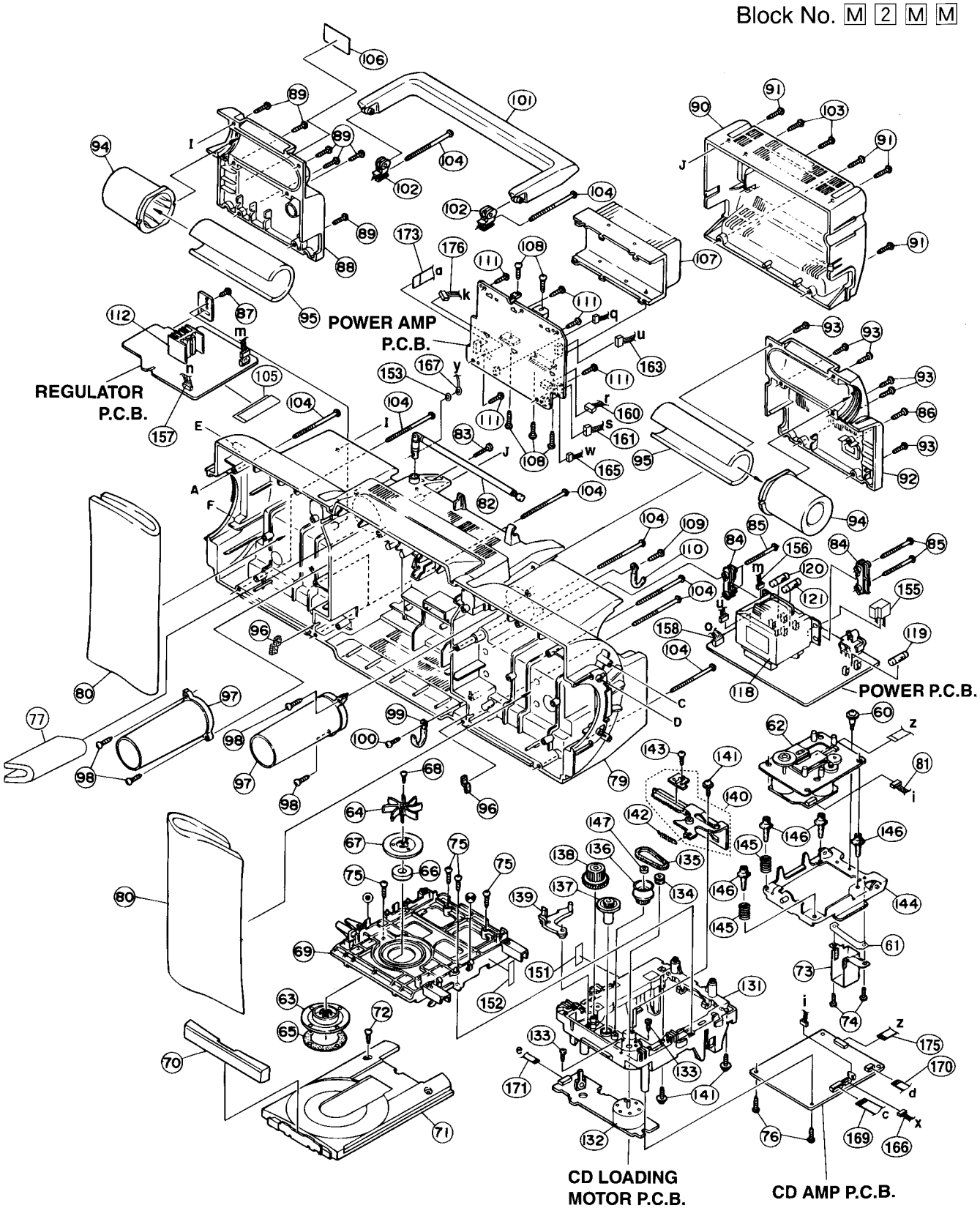
⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	60	E406293-001	SPECIAL SCREW		1		
	61	LV40705-001A	SHIELD RUBBER	FOR SHIELD CASE	1		
	62	----------	CD MECHA		1		
	63	VYH3680-001	CLAMPER		1		
	64	LV30744-001A	FIN	FOR CLAMPER	1		
	65	VYH7315-305	PAD		1		
	66	VYH7313-005	MAGNET		1		
	67	VYH3764-001	CLAMPER PLATE		1		
	68	QYSBSF2606Z	SCREW	FOR CLAMPER	1		
	69	LV10099-001A	CD CLAMPER BASE	MIPS	1		
	70	LV30525-001A	CD FITTING	MIPS SILKX1	1		
	71	VYH1240-001	TRAY		1		
	72	QYSBSF3008Z	SCREW	TRAY STOPPER	1		
	73	VMA4619-002	SHIELD CASE		1		
	74	LV40708-001A	SPECIAL SCREW	FOR SHIELD CASE	2		
	75	QYSBSF3010Z	SCREW	CLAMPER BASE+LO	4		
	76	QYSBSF3010Z	SCREW	FOR CD PWB	2		
	77	LV40436-001A	SOUND ABSOBER	FOR REAR CABI(L	1		
	79	LV10100-001A	REAR CABI	MIPS	1		
	80	LV40445-002A	SOUND ABSOBER	FOR WOOFER	2		
	81	QJJ010-060606	SIN CR C-C WIRE	CD MECHA-CD AMP	1		
	82	FMJA3001-00A	ROD ANT ASS'Y		1		
	83	QYSDSP3012N	SCREW	REAR+ANT	1		
	84	VYH8101-001	TRANS SUPPORT		2		
	85	QYSBSF3030Z	SCREW	REAR+TRANS	4		
	86	QYSBSF3010Z	SCREW	FOR AC+REAR COV	1		
	87	QYSBSF3010Z	SCREW	REGU PWB+REAR	1		
	88	LV10101-002A	DUCT COVER (L)	MIPS	1		
	89	QYSBSF3010Z	SCREW		6		
	90	LV10102-001A	HEAT SINK COVER	ABS	1		
	91	QYSBSF3010Z	SCREW		4		
	92	LV10103-001A	DUCT COVER (R)		1	B,E,EN,EE	
		LV10103-003A	DUCT COVER (R)		1	UB,US	
	93	QYSBSF3010Z	SCREW	REAR+DUCT COVER	6		
	94	LV40447-001A	DUCT CAP(L)		2		
	95	LV40454-002A	SOUND ABSOBER	FOR DUCT CAP	2		
	96	VYSH102-090	SPACER	FOR REAR	2		
	97	LV30526-001A	DUCT(R)	MIPS	2		
	98	QYSBSF3010Z	SCREW		4		
	99	VKZ4001-111S	WIRE CLAMP	FOR REAR+WIRE	1		
	100	QYSBSF3010Z	SCREW	FOR WIRE CLAMP	1		
	101	LV20171-001A	HANDLE		1		
	102	VYH7845-003	HANDLE SUPPORTE		2		
	103	QYSBSF3010Z	SCREW	FOR ANT TERMINA	2		
	104	QYSBSF3045Z	SCREW	FRONT+REAR	10		
	105	LV30225-004A	SPACER	FOR MD REG PWB	1		
	106	LV30528-002A	NAME PLATE		1	B,E,EN	
		LV30528-003A	NAME PLATE		1	EE	
		LV30528-004A	NAME PLATE		1	UB,US	
	107	LV30530-001A	HEAT SINK 1		1		
	108	QYSBSF3012Z	SCREW		5		
	109	QYSBSF3010Z	SCREW	FOR WIRE HOLDER	1		
	110	VKZ4001-110S	WIRE HOLDER	FOR H.SINK PWB	1		
	111	QYSBSF3010Z	SCREW	FOR AMP PWB	5		

BLOCK NO. M2MM□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	112	VYH7734-002MM	HEAT SINK		1		
⚠	118	QQT0226-003	POWER TRANS	T1901	1	B,E,EE,EN	
⚠		QQT0226-004	POWER TRANS	T1901	1	UB,US	
⚠	119	QMF51E2-R63-J1	FUSE	F1901	1	B,E,EN,EE	
⚠		QMF51E2-1R25-J1	FUSE	F1901	1	UB,US	
⚠	120	QMFZ031-8R0-J1	FUSE	F1902	1		
⚠	121	QMF51E2-1R0-J1	FUSE	F1903	1		
	131	VYH1238-001	LOADING BASE		1		
	132	MMN-6F1LB8K	DC MOTOR		1		
	133	QYSPSPT2640Z	SCREW		2		
	134	E75984-221	MOTOR PULLEY		1		
	135	E75950-002	REEL BELT		1		
	136	E75985-221	GEAR(1)		1		
	137	E75986-221	GEAR(2)		1		
	138	E75987-221	GEAR(3)		1		
	139	E307162-331	ACTION LEVER		1		
	140	E307252-331	CAM PLATE		1		
	141	E65923-003	TAPPING SCREW		3		
	142	VYH7787-001	SPRING		1		
	143	QYSBSF3008Z	SCREW		1		
	144	E307179-332	ELEVATOR BASE		1		
	145	E406871-001	SPRING		2		
	146	E406294-002	INSULATOR		4		
	147	E60912-005SS	SPEED NUT		1		
	151	VYSA1R4-056	SPACER	FOR CD WIRE	1		
	152	VYSA1R4-060	SPACER	FOR CD WIRE	1		
	153	VYSS2R3-009	SPACER	FOR ROD ANT	1		
	155	LV40446-001A	VOL.SEL.HOLDER		1	UB,US	
	156	QJK007-033003	SIN CR C-B WIRE	POWER-MD REGU	1		
	157	QJK008-054200	SIN CR C-B WIRE	MD REG-MD JOINT	1		
	158	QJK009-042404	SIN CR C-B WIRE	POWER-FL PWB	1		
	160	QJJ009-042804	SIN CR C-B WIRE	AMP-MD JOINT	1		
	161	QJJ007-083003	SIN CR C-B WIRE	AMP-MD JOINT	1		
	163	WJK0023-001A	SIN CR C-B WIRE	AMP-POWER	1		
	165	WJJ0037-002A	WIRE&TUBE	WOOFER WIRE	1		
	166	WJN0015-001A	WIRE&TUBE	CD AMP-MD JOINT	1		
	167	WJJ0052-001A	E-SI C WIRE C-C	ANT WIRE ROD-CO	1		
	169	QUQ412-1218CJ	CARD WIRE	CD AMP-MAIN	1		
	170	QUQ412-0720CJ	CARD WIRE	CD AMP-MAIN	1		
	171	QUQ412-0722CJ	CARD WIRE	CD LOADING-MAIN	1		
	173	QUQ412-1306DJ	CARD WIRE	AMP-TUNER PWB	1		
	175	QUQ110-1508AJ	CARD WIRE	CD MECHA-CD AMP	1		
	176	QJK008-040704	SIN CR C-B WIRE	AMP-TUNER	1		

■General section 2

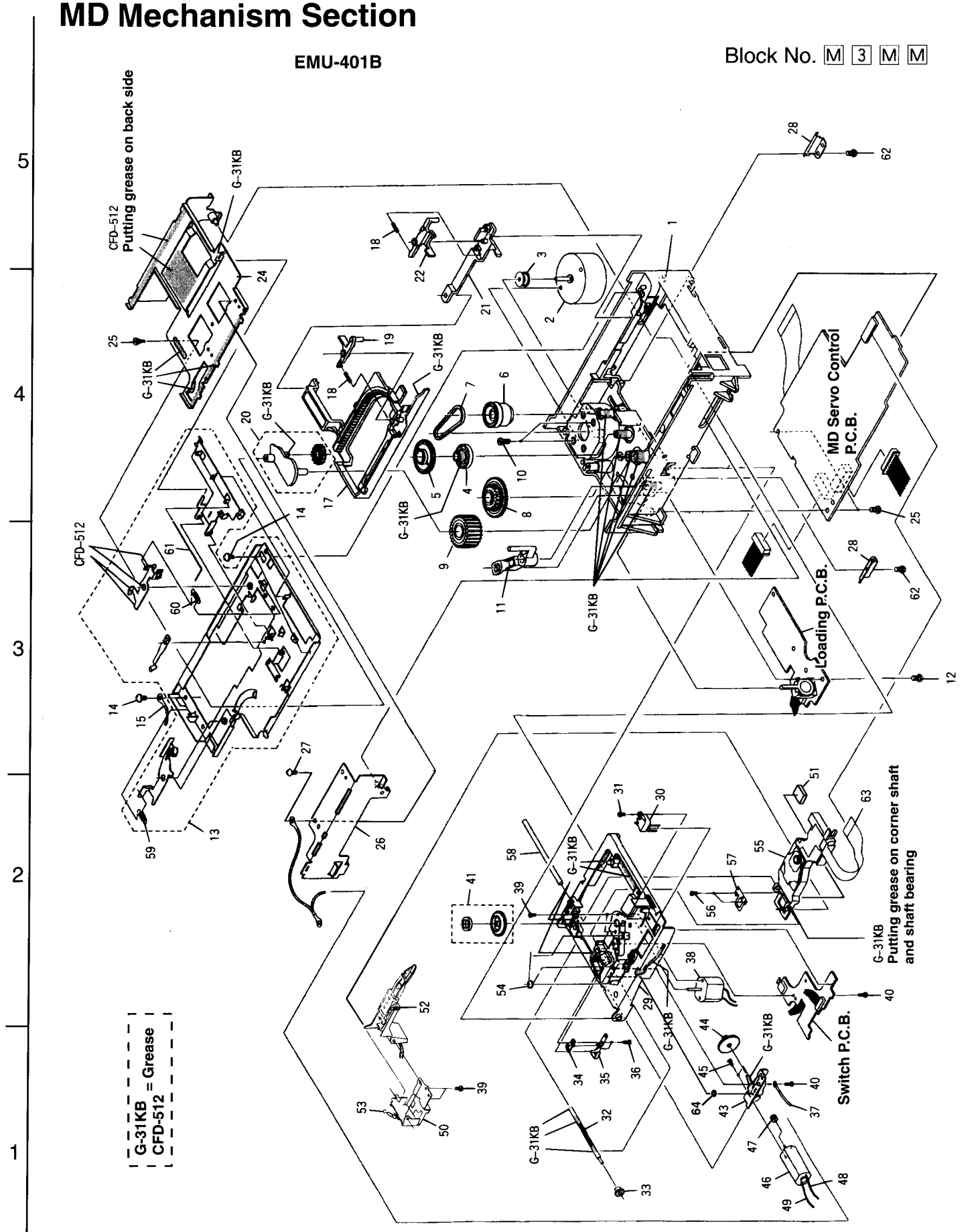
Block No. M 2 M M



MD Mechanism Section

EMU-401B

Block No. M 3 M M



■ Parts List (MD Mechanism)

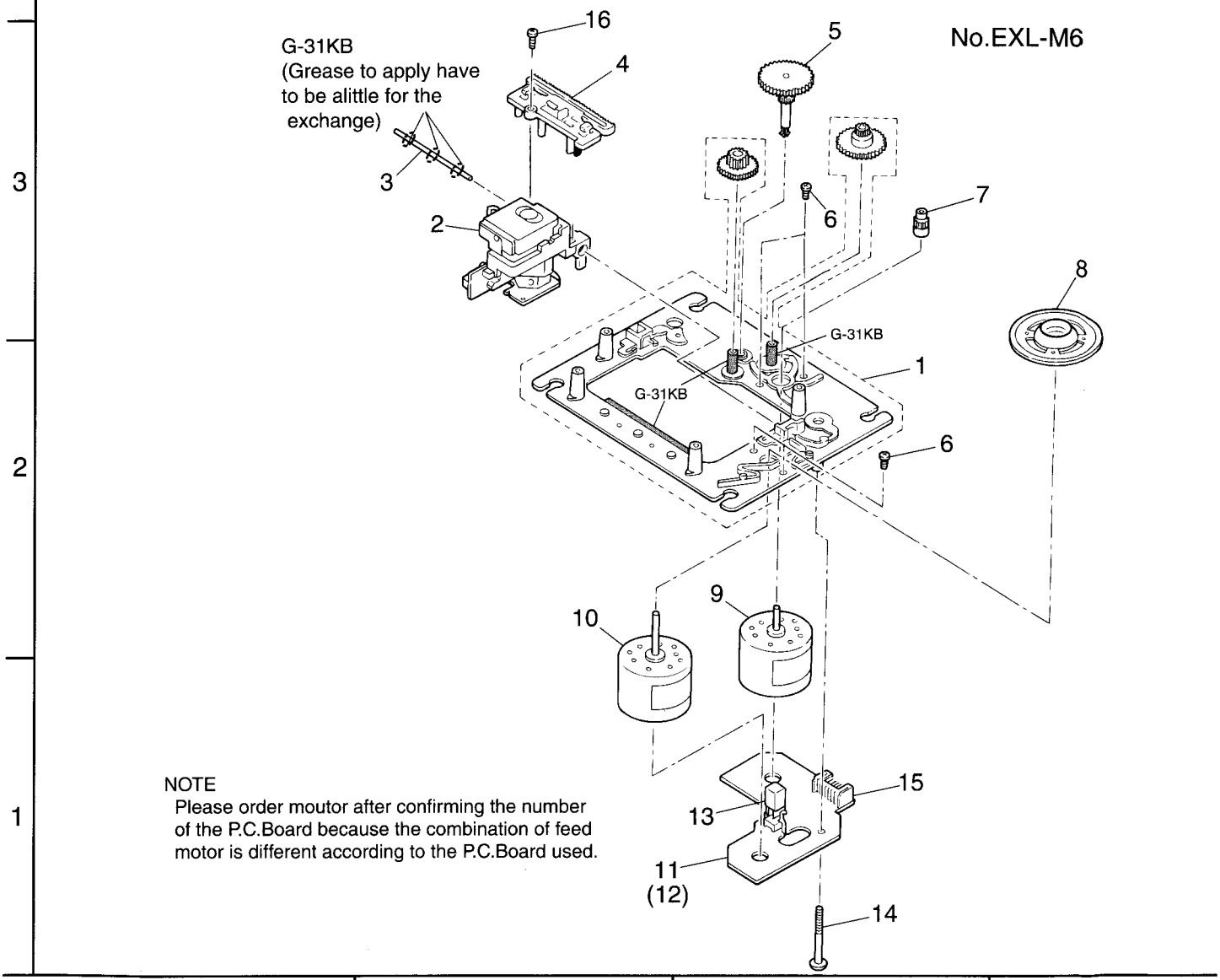
BLOCK NO. M3MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	E103156-002	LOADING BASE		1		
	2	MSN5G543C	MOTOR		1		
	3	E75984-222SS	MOTOR PULLEY		1		
	4	E409146-001	GEAR(5)		1		
	5	E409143-001	GEAR(2)		1		
	6	E409142-002	GEAR(1)		1		
	7	E75950-002	BELT		1		
	8	E409144-001	GEAR(3)		1		
	9	E409145-001	GEAR(4)		1		
	10	QYSPSPT2640Z	MINI SCREW		2		
	11	E409149-002	SW LEVER		1		
	12	QYSBSF2606M	SCREW		1		
	13	E309825-010	CAR.BASE ASSY		1		
	14	QYSBSFG2606Z	SCREW		3		
	15	EWPZ01-027	TERMINAL WIRE		1		
	17	E208853-001	RACK		1		
	18	E409153-002	SPRING		2		
	19	E409152-002	HOOK(L)		1		
	20	E409195-002	P.GEAR ASSY		1		
	21	E309824-001	LINK		1		
	22	E409154-002	HOOK(R)		1		
	24	E309829-004KP	S.BKT (R) ASSY		1		
	25	E409163-001	SPECIAL SCREW		3		
	26	E409164-003	S.BKT (L) ASSY		1		
	27	QYSBST2606Z	T.SCREW		1		
	28	LV40591-001A	BRACKET		2		
	29	E103258-001	CHASSIS BAS		1		
	30	QSW0508-001	PUSH SW		1		
	31	QYSPSGT2035M	MINI SCREW		1		
	32	E409553-001	LEAD SCREW		1		
	33	E409542-001	GEAR F.LEAD		1		
	34	E409548-001	TH.PLATE		1		
	35	E409135-001	THRUST SPRING		1		
	36	E409332-001	SPECIAL SCREW		2		
	37	EWT025-008	TERMINAL WIRE		1		
	38	FF-110PH-08280	SP.MOTOR		1		
	39	QYSPSPU1720M	MINI SCREW		4		
	40	QYSPST2606Z	SCREW		2		
	41	LE30470-001A	TURN TABLE		1		
	43	E409129-005	M.BKT ASSY		1		
	44	E409133-001	MIDDLE GEAR		1		
	45	QYSPSPU1420Z	MINI SCREW		2		
	46	FF-N30VA-09210	FEED MOTOR		1		
	47	E409550-001	F.M.GEAR		1		
	48	QWE269-06BB	WIRE ASSY		1		
	49	QWE260-05BB	WIRE ASSY		1		
	50	E310179-001	H.JOINT		1		
	51	LE30001-008A	SPACER		1		
	52	HMD-7B	HEAD UNIT		1		
	53	E409158-004	SPRING		1		
	54	E409165-001	M.SPRING		1		
	55	KMS-260C	MD PICK UNIT		1		
	56	QYSPSPT1414Z	SCREW		2		
	57	E408255-003	RACK SPRING		1		
	58	E409141-001	GUIDE SHAFT		1		
	59	E409158-002	SPRING		1		
	60	E409158-003	SPRING		1		
	61	E409167-001	SPRING BAR		1		
	62	QYSBSF2606M	SCREW		2		
	63	EMW40008-001	FPC CABLE		1		
	64	QYWFM266013	WASHER		1		

CD Mechanism Section

■Grease Point

Block No. M 4 M M



NOTE
Please order moutor after confirming the number of the P.C.Board because the combination of feed motor is different according to the P.C.Board used.

■CD Mechanism Assembly Parts List

⚠	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	EPB-002PK	MECHA. BASE ASSY	1		
	2	OPTIMA-150S	OPTICAL PICK UP	1		
	3	E407782-001	CD SHAFT	1		
	4	E307746-001	CD RACK	1		
	5	EPB-003A	MECHA GEAR	1		
	6	SDSP2003N	SCREW	4		
	7	E406750-001	PINION GEAR	1		
	8	E75807-302	TURN TABLE	1	Use the 1CD	
		EPB309173A	TURN TABLE	1	Use the 3CD	
	9	E406784-001	FEED MOTOR	1	Use the No.11 P.C.Board	
		MDN-4RA3ETA-1	FEED MOTOR	1	Use the No.12 P.C.Board	
	10	E406783-001	SPINDLE MOTOR	1		
	11	EMW10190-001(S)	P.C.BOARD	1		
	12	EMW10190-221(S)	P.C.BOARD	1		
	13	ESB1100-005	LEAF SWITCH	1		
	14	E75832-001	SCREW	1		
	15	EMV5109-006B	CONN. TERMINAL	1		
	16	SDSF2006Z	SCREW	1		

■ Main P.C.B.

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN301	QGF1205C1-13	CONNECTOR	TO TU PWB	
	CN302	QGA2501C1-08	8P CONNECTOR	TO MD JOINT	
	CN303	QGA2001C1-04	4P PLUG ASSY	TO MD JOINT	
	CN304	QGA2501C1-06	6P CONNECTOR	TO TRANS PWB	
	CN305	QGA2501C1-04	4P CONNECTOR	TO WF SP	
	C1901	QETN1JM-107Z	E CAPACITOR	100MF 20% 63V	
	C1902	QETN1JM-107Z	E CAPACITOR	100MF 20% 63V	
	C1903	QET41HM-226	E CAPACITOR	22MF 20% 50V	
	C1904	QET41HM-226	E CAPACITOR	22MF 20% 50V	
	C1905	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C1906	QDYB1CM-103Y	C CAPACITOR		
⚠	C1911	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
⚠	C1912	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
⚠	C1913	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
⚠	C1914	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C1915	QCF31HZ-223Z	C.CAPACITOR	.022MF +80:-20%	
	C1916	QCF31HZ-223Z	C.CAPACITOR	.022MF +80:-20%	
	C1917	QCF31HZ-223Z	C.CAPACITOR	.022MF +80:-20%	
	C1918	QCF31HZ-223Z	C.CAPACITOR	.022MF +80:-20%	
	C1919	QET41CM-477	E CAPACITOR	470MF 20% 16V	
	C2001	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C2002	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C2003	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C3101	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3102	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3103	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
	C3104	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C3105	NCB21HK-332X	C CAPACITOR	3300PF 10% 50V	B,E,EN
	C3121	QTE1V06-106Z	E.CAPACITOR		
	C3122	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C3123	QET41EM-476	E CAPACITOR	47MF 20% 25V	
	C3124	QET41EM-476	E CAPACITOR	47MF 20% 25V	
	C3125	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3126	QTE1C06-476Z	E CAPACITOR		
	C3127	QET41EM-108	E CAPACITOR	1000MF 20% 25V	
	C3141	QETN1HM-684Z	E CAPACITOR	.68MF 20% 50V	
	C3142	QFN31HJ-563Z	M.CAPA. I.M	.056MF 5% 50V	
	C3143	QFN31HJ-563Z	M.CAPA. I.M	.056MF 5% 50V	
	C3145	QTE1C06-226Z	E CAPACITOR		
	C3201	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3202	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3203	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
	C3204	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C3205	NCB21HK-332X	C CAPACITOR	3300PF 10% 50V	B,E,EN
	C3221	QTE1V06-106Z	E.CAPACITOR		
	C3222	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C3223	QET41EM-476	E CAPACITOR	47MF 20% 25V	
	C3224	QET41EM-476	E CAPACITOR	47MF 20% 25V	
	C3225	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3226	QTE1C06-476Z	E CAPACITOR		
	C3227	QET41EM-108	E CAPACITOR	1000MF 20% 25V	
	C3241	QETN1HM-684Z	E CAPACITOR	.68MF 20% 50V	
	C3242	QFN31HJ-563Z	M.CAPA. I.M	.056MF 5% 50V	
	C3243	QFN31HJ-563Z	M.CAPA. I.M	.056MF 5% 50V	
	C3245	QTE1C06-226Z	E CAPACITOR		

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C3301	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3302	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3303	QET41CM-336	E CAPACITOR	33MF 20% 16V	
	C3304	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C3305	QET41CM-227	E CAPACITOR	220MF 20% 16V	
	C3306	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3321	QET41AM-227	E CAPACITOR	220MF 20% 10V	
	C3322	QET41EM-227	E CAPACITOR	220MF 20% 25V	
	C3323	QET41EM-227	E CAPACITOR	220MF 20% 25V	
	C3324	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C3325	QFVF1HJ-184Z	TF CAPACITOR	.18MF 5% 50V	
	C3326	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C3341	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C3342	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C3343	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C3901	QEZ0437-828	E CAPACITOR	8200MF	
	C3903	QENC1HM-105Z	NP E CAPACITOR	1.0MF 20% 50V	
	C3904	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
	C3905	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C3906	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C3921	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3922	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C3941	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3942	QDYB1CM-103Y	C CAPACITOR		
	C3943	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	D1901	1SR35-100A-T5	SI DIODE		
	D1902	1SR35-100A-T5	SI DIODE		
	D1903	MTZJ36C-T2	Z.DIODE I.M		
	D1904	MTZJ4.7B-T2	Z DIODE I M		
⚠	D1911	KBU603G-A3	DIODE		
⚠	D1912	1SR35-100A-T5	SI DIODE		
⚠	D1913	1SR35-100A-T5	SI DIODE		
⚠	D1914	1SR35-100A-T5	SI DIODE		
⚠	D1915	1SR35-100A-T5	SI DIODE		
	D2002	SLR-342MC-T	LED I.M	ACS(GREEN)	
	D3321	1SS254-T2	SI DIODE	AHB DET	
	D3322	1SR35-100A-T5	SI DIODE		
	D3342	MTZJ4.7C-T2	Z.DIODE I.M		
	D3901	1SS254-T2	SI DIODE		
	D3902	MTZJ10A-T2	ZENER DIODE		
	D3903	1SS254-T2	SI DIODE		
	D3921	MTZJ9.1A-T2	ZENER DIODE		
	D3922	1SS254-T2	SI DIODE		
	D3923	RB721Q-T2	S.B.DIODE		
	D3941	MTZJ4.3B-T2	ZENER DIODE		
	D3942	1SS254-T2	SI DIODE		
⚠	IC301	LA4705NA	IC	WOOFER AMP	
⚠	IC302	TA8229K	IC	SQUAWKER AMP	
	IC303	BA15218F-XE	IC	BASS BOOST AMP	
	J1901	QNC0006-001	AC SOCKET	NON-SW TYPE	
	K1901	QQR0779-001Z	INDUCTOR		
	K1902	QQR0779-001Z	INDUCTOR		
	K1903	QQR0779-001Z	INDUCTOR		
	K1904	QQR0779-001Z	INDUCTOR		
	LF191	QQR0807-001	INDUCTOR	(B1312 B1704)	B,E,EN

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q1901	2SB1565/EF/	TRANSISTOR		
	Q2002	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3121	2SD2114K/VW/-X	CHIP TR.C.M	SMUTE	
	Q3141	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3221	2SD2114K/VW/-X	CHIP TR.C.M	SMUTE	
	Q3241	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3301	2SD2114K/VW/-X	CHIP TR.C.M	SMUTE	
	Q3302	2SA1037AK/RS/-X	CHIP TR.C.M	SMUTE DRIVER	
	Q3303	DTC114EKA-X	TRANSISTOR	WFVOL3	
	Q3304	DTC114EKA-X	TRANSISTOR	WFVOL2	
	Q3305	DTC114EKA-X	TRANSISTOR	WFVOL1	
	Q3321	2SA950/OY/-T	TR.I/M		
	Q3322	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3901	2SB1565/EF/	TRANSISTOR	SW10V REG.	
	Q3902	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3903	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3904	2SC2412K/RS/-X	CHIP TR.C.M		
	Q3921	2SC3422/OY/	TRANSISTOR	SW8V REG.	
	Q3941	2SB562/BC/-T	TRANSISTOR		
	Q3943	2SC2412K/RS/-X	CHIP TR.C.M		
	R1901	QRJ146J-1R0X	UNF C.RESISTOR	1.0 5% 1/4W	
	R1902	QRJ146J-1R0X	UNF C.RESISTOR	1.0 5% 1/4W	
	R1903	QRZ9018-2R2	FUSI RESISTOR	2.2 1/0W	
	R1904	QRE141J-302Y	C RESISTOR	3.0K 5% 1/4W	
	R1905	QRE141J-302Y	C RESISTOR	3.0K 5% 1/4W	
	R1906	QRE141J-680Y	C RESISTOR	68 5% 1/4W	
	R2004	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R2005	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R2006	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R2007	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R2008	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R2009	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R2010	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R2011	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R2012	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R2013	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R2014	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W	
	R2015	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R2016	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R2017	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R2018	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R2019	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R2020	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R2021	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R2022	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R2023	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R2024	NRSA02J-471X	RES. C.M	470 5% 1/10W	
	R2025	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
⚠	R3101	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
⚠	R3102	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R3121	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R3122	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R3123	NRSA02J-271X	MG RESISTOR	270 5% 1/10W	
	R3124	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R3125	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	

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⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R3126	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R3141	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R3142	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R3143	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3144	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R3145	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3146	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3148	NRSA02J-154X	RES. C.M	150K 5% 1/10W	
⚠	R3201	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
⚠	R3202	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R3221	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R3222	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R3223	NRSA02J-271X	MG RESISTOR	270 5% 1/10W	
	R3224	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R3225	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R3226	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R3241	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R3242	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R3243	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3244	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R3245	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3246	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3248	NRSA02J-154X	RES. C.M	150K 5% 1/10W	
	R3301	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R3302	NRSA02J-303X	RES. C.M	30K 5% 1/10W	
	R3303	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R3304	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R3305	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R3306	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3310	NRSA02J-133X	MG RESISTOR	13K 5% 1/10W	
	R3311	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R3321	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R3322	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R3323	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R3324	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R3325	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R3326	NRSA02J-220X	MG RESISTOR	22 5% 1/10W	
	R3341	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R3342	NRSA02J-474X	MG RESISTOR	470K 5% 1/10W	
	R3343	NRSA02J-131X	RES. C.M	130 5% 1/10W	
	R3344	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R3901	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R3902	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R3903	NRSA02J-564X	MG RESISTOR	560K 5% 1/10W	
	R3904	NRSA02J-331X	MG RESISTOR	330 5% 1/10W	
	R3905	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R3906	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R3907	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R3908	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R3909	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R3910	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R3911	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R3912	NRSA02J-912X	RES. C.M	9.1K 5% 1/10W	
	R3913	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R3921	QRE141J-241Y	C RESISTOR	240 5% 1/4W	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R3922	QRE141J-241Y	C RESISTOR	240 5% 1/4W	
	R3925	NRSA02J-393X	MG RESISTOR	39K 5% 1/10W	
	R3926	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R3941	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R3942	NRSA02J-121X	MG RESISTOR	120 5% 1/10W	
	R3943	NRSA02J-393X	MG RESISTOR	39K 5% 1/10W	
	R3944	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	S1901	QSW0740-001	VOLTAGE SWITCH		UB,US
	S2005	QSW0622-001Z	TACT SWITCH	MID/TRE	
	S2006	QSW0622-001Z	TACT SWITCH	VOL-	
	S2007	QSW0622-001Z	TACT SWITCH	VOL+	
	S2008	QSW0622-001Z	TACT SWITCH	TITLE	
	S2009	QSW0622-001Z	TACT SWITCH	DISP/CHARA	
	S2010	QSW0622-001Z	TACT SWITCH	CANSEL	
	S2011	QSW0622-001Z	TACT SWITCH	TIMER	
	S2012	QSW0622-001Z	TACT SWITCH	AUX	
	S2013	QSW0622-001Z	TACT SWITCH	EDIT	
	S2014	QSW0622-001Z	TACT SWITCH	ENTER	
	S2015	QSW0622-001Z	TACT SWITCH	SET	
	S2016	QSW0622-001Z	TACT SWITCH	UP	
	S2017	QSW0622-001Z	TACT SWITCH	STOP	
	S2018	QSW0622-001Z	TACT SWITCH	DOWN	
	S2019	QSW0622-001Z	TACT SWITCH	TUNER	
	S2020	QSW0622-001Z	TACT SWITCH	CD	
	S2021	QSW0622-001Z	TACT SWITCH	MD	
	S2022	QSW0622-001Z	TACT SWITCH	ACS	
	S2023	QSW0622-001Z	TACT SWITCH	BASS+	
	S2024	QSW0622-001Z	TACT SWITCH	BASS-	
	VR201	QSW0739-001	R ENCODER		
	Z1901	QNG0019-001Z	FUSE CLIP	FOR F1901	
	Z1902	QNG0019-001Z	FUSE CLIP	FOR F1902	
	Z1903	QNG0019-001Z	FUSE CLIP	FOR F1903	
	Z1911	QNG0019-001Z	FUSE CLIP	FOR F1901	
	Z1912	QNG0019-001Z	FUSE CLIP	FOR F1902	
	Z1913	QNG0019-001Z	FUSE CLIP	FOR F1903	

■ Control P.C.B.

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN201	QGB2020K1-10	CONNECTOR	TO TU PWB	
	CN202	QGA2001C1-07	7P PLUG ASSY	TO FUNCTION SW	
	CN511	QGB1214K1-08S	CONNECTOR	TO TU PWB	
	CN512	QGF1205F1-07	CONNECTOR	TO CD UNIT	
	CN513	QGB1214J1-10S	CONNECTOR	TO MD JOINT	
	CN514	QGB1214J1-12S	CONNECTOR	TO MD JOINT	
	CN515	QGB1214K1-10S	CONNECTOR	TO TU PWB	
	CN701	QGF1205F1-06	CONNECTOR	TO FL PWB	
	CN702	QGB1214K1-10S	CONNECTOR	TO TU PWB	
	CN703	QGF1205F1-07	CONNECTOR	TO CD UNIT	
	CN704	QGF1205F1-12	CONNECTOR	TO CD UNIT	
	CN801	QGF1205F1-06	CONNECTOR	TO MICOM PWB	
	CN802	QGA2501F1-04	CONNECTOR	TO TRANS PWB	
	C2004	QET41EM-476	E CAPACITOR	47MF 20% 25V	
	C5101	NCS21HJ-681X	C CAPACITOR	680PF 5% 50V	
	C5102	QTE1V39-475Z	E CAPACITOR		
	C5103	NCS21HJ-220X	C CAPACITOR	22PF 5% 50V	
	C5105	QTE1V06-106Z	E.CAPACITOR		
	C5106	QTE1V39-475Z	E CAPACITOR		
	C5107	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C5108	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C5109	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C5110	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C5141	QTE1V39-475Z	E CAPACITOR		
	C5142	QFN41HJ-182	M CAPACITOR	1800PF 5% 50V	
	C5143	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C5144	QFN31HJ-471Z	M.CAPA. I.M	470PF 5% 50V	
	C5171	QFN41HJ-562	M CAPACITOR	5600PF 5% 50V	
	C5172	QFN41HJ-562	M CAPACITOR	5600PF 5% 50V	
	C5173	QFN41HJ-682	M CAPACITOR	6800PF 5% 50V	
	C5174	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C5175	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	B,E,EN
	C5181	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C5182	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C5183	NCS21HJ-100X	C CAPACITOR	10PF 5% 50V	
	C5184	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C5186	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	B,E,EN
	C5201	NCS21HJ-681X	C CAPACITOR	680PF 5% 50V	
	C5202	QTE1V39-475Z	E CAPACITOR		
	C5203	NCS21HJ-220X	C CAPACITOR	22PF 5% 50V	
	C5205	QTE1V06-106Z	E.CAPACITOR		
	C5206	QTE1V39-475Z	E CAPACITOR		
	C5207	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C5208	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C5209	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C5210	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C5241	QTE1V39-475Z	E CAPACITOR		
	C5242	QFN41HJ-182	M CAPACITOR	1800PF 5% 50V	
	C5243	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C5244	QFN31HJ-471Z	M.CAPA. I.M	470PF 5% 50V	
	C5271	QFN41HJ-562	M CAPACITOR	5600PF 5% 50V	
	C5272	QFN41HJ-562	M CAPACITOR	5600PF 5% 50V	
	C5273	QFN41HJ-682	M CAPACITOR	6800PF 5% 50V	
	C5274	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C5275	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	B,E,EN

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C5281	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C5282	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C5283	NCS21HJ-100X	C CAPACITOR	10PF 5% 50V	
	C5284	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C5286	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	B,E,EN
	C5301	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C5302	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C5303	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C5304	QET41CM-226	E CAPACITOR	22MF 20% 16V	
	C5305	QET41AM-477	E CAPACITOR	470MF 20% 10V	
	C5341	NCS21HJ-330X	C CAPACITOR	33PF 5% 50V	
	C5342	NCS21HJ-680X	C.CAPA. C.M	68PF 5% 50V	
	C5343	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C5344	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C5345	QEK41CM-226	E CAPACITOR	22MF 20% 16V	
	C5346	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C5347	NCB21HK-473X	C CAPACITOR	.047MF 10% 50V	
	C5348	QEKC1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C5349	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C5350	NCS21HJ-272X	C.CAPA. C.M	2700PF 5% 50V	
	C5351	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C5371	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C5372	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C5374	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C5375	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C5377	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C5378	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C5381	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C5382	QEKC1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C5383	QEKC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C5384	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C5385	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C5386	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	B,E,EN
	C5387	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	B,E,EN
	C7001	NCS21HJ-270X	C.CAPACITOR	27PF 5% 50V	
	C7002	NCS21HJ-220X	C CAPACITOR	22PF 5% 50V	
	C7003	NCS21HJ-330X	C CAPACITOR	33PF 5% 50V	
	C7004	NCS21HJ-330X	C CAPACITOR	33PF 5% 50V	
	C7005	NCS21HJ-390X	C CAPACITOR	39PF 5% 50V	
	C7006	NCS21HJ-390X	C CAPACITOR	39PF 5% 50V	
	C7007	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C7008	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C7009	QET41EM-107	E CAPACITOR	100MF 20% 25V	
	C7010	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C7011	QEZ0229-479Z	EDL.CAPACITOR	47000MF	
	C7012	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C7013	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C7014	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C7015	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7016	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C7017	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C7018	NCB21HK-223X	C CAPACITOR	.022MF 10% 50V	
	C7019	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C7020	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C7021	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C7022	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7023	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7024	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7025	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7026	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C7027	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7028	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C7029	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C7030	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C7031	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7032	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7033	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C7034	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C7036	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C7037	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7038	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7039	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7040	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7041	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7042	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C7043	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C7044	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C8001	QFVF1HJ-124Z	TF CAPACITOR	.12MF 5% 50V	
	C8002	QENC1HM-105Z	NP E CAPACITOR	1.0MF 20% 50V	
	C8003	QENC1HM-105Z	NP E CAPACITOR	1.0MF 20% 50V	
	C8004	QER61HM-106Z	E CAPACITOR	10MF 20% 50V	
	C8005	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C8006	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C8007	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C8008	NCS21HJ-271X	C CAPACITOR	270PF 5% 50V	
	C8009	NCS21HJ-271X	C CAPACITOR	270PF 5% 50V	
	C8010	NCS21HJ-271X	C CAPACITOR	270PF 5% 50V	
	C8011	NCS21HJ-271X	C CAPACITOR	270PF 5% 50V	
	C8012	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C8013	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C8014	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	DI801	QLF0051-001	FL TUBE	FL DISPLAY	
	D2001	SLZ-981C-T09	LED I M	STANDBY LED	
	D5301	1SS254-T2	SI DIODE		
	D5302	1SS254-T2	SI DIODE		
	D5303	MTZJ6.2C-T2	ZENER DIODE		
	D5304	MTZJ6.2C-T2	ZENER DIODE		
	D5341	1SS254-T2	SI DIODE		
	D5342	1SS254-T2	SI DIODE		
	D5343	1SS254-T2	SI DIODE		
	D5381	MTZJ4.7C-T2	Z.DIODE I.M		
	D5382	1SS254-T2	SI DIODE		
	D5383	1SS254-T2	SI DIODE		
	D5384	1SS254-T2	SI DIODE		
	D7001	MTZJ8.2B-T2	DIODE		
	D7003	1SS254-T2	SI DIODE		
	D7004	1SS254-T2	SI DIODE		
	D7005	1SS254-T2	SI DIODE		
	D7006	MTZJ5.1A-T2	ZENER DIODE		
	D7007	1SS254-T2	SI DIODE		

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D7008	1SR35-100A-T5	SI DIODE		
	IC201	GP1U281X	IR DETECT UNIT		
	IC501	BA15218F-XE	IC		
	IC502	BA15218F-XE	IC	ACS CONT DET.	
	IC503	BH3852S	IC	VOL IC	
	IC504	BA15218F-XE	IC	HP AMP	
	IC701	MN101C15FAM	IC	SYS-MICON	
	IC702	NJM78M06FA	IC	US6V	
	IC801	M66004FP-X	IC	FL DRIVER	
	J5301	QNS0047-001	JACK	AUX	
	J5302	QNS0101-001	JACK	HP	
	K5301	QQR0779-001Z	INDUCTOR	AUX GND	
	K5303	QQR0779-001Z	INDUCTOR	CD GND	
	K5382	NQR0227-004X	F.BEADS		
	K7001	QQR0779-001Z	INDUCTOR		
	K7002	QQR0779-001Z	INDUCTOR		
	K7003	QQR0779-001Z	INDUCTOR		
	K7004	QQR0779-001Z	INDUCTOR		
	K8001	QQR0779-001Z	INDUCTOR		
	L5181	QQL231K-470Y	INDUCTOR	FOR FTZ	B,E,EN
	L5281	QQL231K-470Y	INDUCTOR	FOR FTZ	B,E,EN
	L5301	QQL25CK-330Z	INDUCTOR	CD +B	
	L7001	QQL29BJ-100Z	INDUCTOR		
	L7002	QQL231K-4R7Y	INDUCTOR		
	L7003	QQL29BJ-100Z	INDUCTOR		
	L7004	QQL29BJ-100Z	INDUCTOR		
	L7005	QQL231K-4R7Y	INDUCTOR		
	L8001	QQL29BJ-100Z	INDUCTOR		
	L8002	QQL29BJ-100Z	INDUCTOR		
	Q2001	DTC143TKA-X	DIGI TRANSISTOR		
	Q5101	2SD2114K/VW/-X	CHIP TR.C.M	AUX MUTE	
	Q5102	2SD2114K/VW/-X	CHIP TR.C.M	MD MUTE	
	Q5141	2SK301/QR/-T	FET		
	Q5181	2SD2114K/VW/-X	CHIP TR.C.M	HP MUTE	
	Q5182	2SD2114K/VW/-X	CHIP TR.C.M	HP MUTE	
	Q5201	2SD2114K/VW/-X	CHIP TR.C.M	AUX MUTE	
	Q5202	2SD2114K/VW/-X	CHIP TR.C.M	MD MUTE	
	Q5241	2SK301/QR/-T	FET		
	Q5281	2SD2114K/VW/-X	CHIP TR.C.M	HP MUTE	
	Q5282	2SD2114K/VW/-X	CHIP TR.C.M	HP MUTE	
	Q5301	DTA114EKA-X	DIGITAL.TR	AUX MUTE DRIVE	
	Q5302	DTA114EKA-X	DIGITAL.TR	MD MUTE DRIVE	
	Q5341	DTC114EKA-X	TRANSISTOR		
	Q5342	2SC2412K/RS/-X	CHIP TR.C.M		
	Q5343	2SA1037AK/RS/-X	CHIP TR.C.M		
	Q5344	2SA1037AK/RS/-X	CHIP TR.C.M		
	Q5381	2SA1037AK/RS/-X	CHIP TR.C.M	HP MUTE DRIVER	
	Q7001	2SC2668/O/-T	TRANSISTOR	CLOCK	
	Q7002	2SC2668/O/-T	TRANSISTOR	CLOCK	
	Q7003	2SC2412K/R/-X	TRANSISTOR	BUP	
	Q7004	DTC143TKA-X	DIGI TRANSISTOR	RESET	
	Q7005	2SA1037AK/RS/-X	CHIP TR.C.M	+BCTL	
	Q8001	2SC2412K/RS/-X	CHIP TR.C.M		
	Q8002	2SC2412K/RS/-X	CHIP TR.C.M		
	R2001	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R2002	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R2003	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W	
	R2026	NRSA02J-391X	MG RESISTOR	390 5% 1/10W	
	R5101	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5102	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R5103	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R5104	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5105	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	UB,US
	R5105	NRSA02J-123X	RES. C.M	12K 5% 1/10W	B,E,EN,EE
	R5107	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R5108	NRSA02J-623X	MG RESISTOR	62K 5% 1/10W	
	R5110	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R5111	NRSA02J-433X	RES. C.M	43K 5% 1/10W	
	R5112	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5113	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R5114	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R5115	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R5116	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R5117	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	B,E,EN
	R5141	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R5142	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R5143	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R5144	NRSA02J-475X	MG RESISTOR	4.7M 5% 1/10W	
	R5145	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5181	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R5182	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5184	NRSA02J-184X	MG RESISTOR	180K 5% 1/10W	
	R5185	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R5186	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5187	NRSA02J-220X	MG RESISTOR	22 5% 1/10W	
	R5188	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5189	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5190	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R5201	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5202	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R5203	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R5204	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5205	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	UB,US
	R5205	NRSA02J-123X	RES. C.M	12K 5% 1/10W	B,E,EN,EE
	R5207	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R5208	NRSA02J-623X	MG RESISTOR	62K 5% 1/10W	
	R5210	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R5211	NRSA02J-433X	RES. C.M	43K 5% 1/10W	
	R5212	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5213	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R5214	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R5215	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R5216	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R5217	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	B,E,EN
	R5241	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R5242	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R5243	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R5244	NRSA02J-475X	MG RESISTOR	4.7M 5% 1/10W	
	R5245	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5281	NRSA02J-103X	RES. C.M	10K 5% 1/10W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R5282	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5284	NRSA02J-184X	MG RESISTOR	180K 5% 1/10W	
	R5285	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R5286	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5287	NRSA02J-220X	MG RESISTOR	22 5% 1/10W	
	R5288	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5289	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R5290	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R5301	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5302	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5303	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R5341	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R5342	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R5343	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5344	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R5345	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R5346	NRSA02J-822X	MG RESISTOR	8.2K 5% 1/10W	
	R5347	NRSA02J-822X	MG RESISTOR	8.2K 5% 1/10W	
	R5348	NRSA02J-221X	MG RESISTOR	220 5% 1/10W	
	R5349	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R5350	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R5351	NRSA02J-475X	MG RESISTOR	4.7M 5% 1/10W	
	R5352	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R5353	NRSA02J-475X	MG RESISTOR	4.7M 5% 1/10W	
	R5354	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R5355	NRSA02J-124X	MG RESISTOR	120K 5% 1/10W	
	R5357	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R5358	NRSA02J-124X	MG RESISTOR	120K 5% 1/10W	
	R5359	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R5372	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R5373	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R5374	NRSA02J-154X	RES. C.M	150K 5% 1/10W	
	R5376	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R5381	NRSA02J-221X	MG RESISTOR	220 5% 1/10W	
	R5382	NRSA02J-221X	MG RESISTOR	220 5% 1/10W	
	R5383	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R5384	NRSA02J-221X	MG RESISTOR	220 5% 1/10W	
	R5385	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R5386	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R7001	NRSA02J-822X	MG RESISTOR	8.2K 5% 1/10W	
	R7002	NRSA02J-822X	MG RESISTOR	8.2K 5% 1/10W	
	R7003	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7004	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7005	NRSA02J-331X	MG RESISTOR	330 5% 1/10W	
	R7006	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R7008	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R7009	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7010	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7011	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7012	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7013	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7014	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7015	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7016	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7017	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R7018	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7019	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7020	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7021	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7022	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7023	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7024	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7025	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7026	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7027	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7028	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7029	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7030	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7031	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7032	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7033	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7034	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R7035	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7036	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R7037	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R7038	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R7039	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R7040	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7041	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R7042	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7043	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7044	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7045	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7046	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7047	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7048	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7049	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7050	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R7051	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7052	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7053	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R7054	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7055	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7056	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R7057	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7058	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7059	NRSA02J-682X	MG RESISTOR	6.8K 5% 1/10W	
	R7060	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7061	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7062	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R7063	NRSA02J-243X	MG RESISTOR	24K 5% 1/10W	
	R7064	NRSA02J-243X	MG RESISTOR	24K 5% 1/10W	
	R7065	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7066	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7067	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7068	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7069	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R7070	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R7071	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R7072	NRSA02J-103X	RES. C.M	10K 5% 1/10W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R7073	NRSA02J-243X	RES. C.M	24K 5% 1/10W	EE
	R7073	NRSA02J-622X	RES. C.M	6.2K 5% 1/10W	UB,US
	R7074	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R7075	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R7076	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R7077	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R8001	NRSA02J-273X	MG RESISTOR	27K 5% 1/10W	
	R8002	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R8003	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R8004	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R8005	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R8006	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R8007	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R8008	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R8009	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R8010	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R8011	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	S2001	QSW0622-001Z	TACT SWITCH	POWER ON/OFF	
	S2002	QSW0622-001Z	TACT SWITCH	MD REC	
	S2003	QSW0622-001Z	TACT SWITCH	CD EJECT	
	S2004	QSW0622-001Z	TACT SWITCH	MD EJECT	
	X7001	QAX0416-001Z	CERA LOCK	SYS MAIN CK	
	X7002	QAX0401-001	CRYSTAL	SYS SUB CK	

■ TUNER P.C.B.(B/E/EE/EN Version)

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 1	NCB21HK-223X	C CAPACITOR	.022MF 10% 50V	
	C 2	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 3	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 4	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 5	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 6	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 7	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C 8	NCS21HJ-150X	C CAPACITOR	15PF 5% 50V	
	C 9	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 11	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 12	NDC21HJ-150X	C CAPACITOR		
	C 13	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 14	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 15	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 16	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 18	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 19	NCB21HK-122X	C CAPACITOR	1200PF 10% 50V	
	C 21	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 30	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 31	NCS21HJ-390X	C CAPACITOR	39PF 5% 50V	
	C 32	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 33	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 34	NCS21HJ-150X	C CAPACITOR	15PF 5% 50V	
	C 35	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 36	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 37	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 39	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 40	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 41	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
	C 42	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
	C 43	QEKC1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 44	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C 45	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 46	NCB21HK-223X	C CAPACITOR	.022MF 10% 50V	
	C 47	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 49	NCB21HK-183X	C CAPACITOR	.018MF 10% 50V	
	C 50	NCB21HK-183X	C CAPACITOR	.018MF 10% 50V	
	C 51	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 52	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 53	NCB21HK-681X	C CAPACITOR	680PF 10% 50V	
	C 55	NCS21HJ-120X	C CAPACITOR	12PF 5% 50V	
	C 60	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 61	NCS21HJ-120X	C CAPACITOR	12PF 5% 50V	
	C 62	NCS21HJ-120X	C CAPACITOR	12PF 5% 50V	
	C 63	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 65	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 66	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C 67	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C 68	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C 69	QEK41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 70	NCB21HK-392X	C CAPACITOR	3900PF 10% 50V	
	C 71	QEKC1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 72	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 91	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 92	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	

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⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 93	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	CF 1	QAX0420-001	CERAMIC FILTER	FM IF	B,E,EN
	CF 1	QAX0403-001	CERAMIC FILTER	FM IF	EE
	CF 2	QAX0403-001	CERAMIC FILTER	FM IF	EE
	CF 2	QAX0421-001	CERAMIC FILTER	FM IF	B,E,EN
	CF 3	QAX0418-001Z	C FILTER		
	CF 4	QAX0409-001	CERA LOCK		
	CN 4	QGA2501C1-02	2P CONNECTOR	FOR TU GND	B,E,EN
	CN101	QGA2501C1-03	3P CONNECTOR		
	CN401	QGB1214J1-08S	CONNECTOR	TO MICOM PWB	
	CN402	QGB1214J1-10S	CONNECTOR	TO MICOM PWB	
	CN403	QGF1205C1-13	CONNECTOR	TO MAIN PWB	
	CN404	QGA2501C1-04	4P CONNECTOR	TO MAIN PWB	
	CN405	QGB2501K1-04	CONNECTOR	TO SC SP	
	CN406	QGB2020J1-10	CONNECTOR	TO EJECT SW	
	CN407	QGB1214J1-10S	CONNECTOR	TO MICOM PWB	
	CN901	QGF1016F1-21	CONNECTOR	TO MD UNIT	
	CN902	QGA2501F1-05	CONNECTOR	TO MD REG PWB	
	CN903	QGB1214K1-10S	CONNECTOR	TO MICOM PWB	
	CN904	QGB1214K1-12S	CONNECTOR	TO MICON PWB	
	CN905	QGA2501C1-02	2P CONNECTOR	TO CD UNIT	
	CN906	QGA2501F1-08	CONNECTOR	TO MAIN PWB	
	CN907	QGA2001C1-04	4P PLUG ASSY		
	C1921	QETM1CM-228	E CAPA	2200MF 20% 16V	
	C1922	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C1923	QENC1HM-105Z	NP E CAPACITOR	1.0MF 20% 50V	
	C1924	QCBB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	C1925	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C1926	QET41AM-477	E CAPACITOR	470MF 20% 10V	
	C1931	QET41AM-227	E CAPACITOR	220MF 20% 10V	
	C1932	QET41AM-477	E CAPACITOR	470MF 20% 10V	
	C1941	QET41CM-226	E CAPACITOR	22MF 20% 16V	
	C1942	QDYB1CM-103Y	C CAPACITOR		
	C1943	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C4101	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	B,E,EN
	C4201	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	B,E,EN
	C4301	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4302	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4303	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
	C4304	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4305	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4321	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4322	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4323	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C4324	QFVF1HJ-274Z	TF CAPACITOR	.27MF 5% 50V	
	C4325	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4326	QFLM1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C4341	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C4342	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4343	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4344	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4345	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4361	QFVJ1HJ-393Z	CAPACITOR	.039MF 5% 50V	
	C4362	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C4363	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	

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⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C4364	QFVF1HJ-184Z	TF CAPACITOR	.18MF 5% 50V	
	C4365	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4366	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C4367	QET41CM-226	E CAPACITOR	22MF 20% 16V	
	C4901	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C4902	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C9101	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C9201	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C9301	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C9302	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C9303	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C9304	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	D 1	1SS254-T2	SI DIODE		
	D 2	1SS254-T2	SI DIODE		
	D 3	1SS254-T2	SI DIODE		
	D 4	1SS254-T2	SI DIODE		
	D1921	1SS254-T2	SI DIODE		
	D1922	MTZJ5.6A-T2	ZENER DIODE		
	D1941	MTZJ4.3C-T2	Z.DIODE I.M		
	D1942	1SS254-T2	SI DIODE		
	D1943	1SS254-T2	SI DIODE		
	D4301	MTZJ4.7C-T2	Z.DIODE I.M		
	D4321	1SS254-T2	SI DIODE		
	D4322	1SS254-T2	SI DIODE		
	D4341	1SS254-T2	SI DIODE		
	D4342	1SS254-T2	SI DIODE		
	D4343	1SS254-T2	SI DIODE		
	D4344	1SS254-T2	SI DIODE		
	D4901	MTZJ3.9B-T2	Z DIODE		
	D4902	1SS254-T2	SI DIODE		
	D4903	1SS254-T2	SI DIODE		
	IC 1	TA2057N	IC		
	IC 2	LC72136N	IC		
	IC401	BA15218F-XE	IC	INPUT AMP	
	IC421	BA15218F-XE	IC	DISTOSION	
	IC441	BA15218F-XE	IC	COMPRESSER	
	IC461	BA15218F-XE	IC	HPF LPF	
	J 1	QNB0014-001	ANT TERMINAL	AM/FM ANT	
	K4301	NQR0227-004X	F.BEADS		
	K4302	NQR0227-004X	F.BEADS		
	K4303	NQR0227-004X	F.BEADS		
	K9301	QQR0779-001Z	INDUCTOR		
	K9302	QQR0779-001Z	INDUCTOR		
	K9303	QQR0779-001Z	INDUCTOR		
	K9304	QQR0779-001Z	INDUCTOR		
	L 1	QQR0871-001	COIL BLOCK	MW/LW RF/OSC	
	L 4	QQL231K-221Y	INDUCTOR		
	L 10	QQR0794-001	TRAP COIL	114KHZ TRAP	B,E,EN
	L 11	QQL231K-2R7Y	INDUCTOR		
	LF411	QQR0797-001	INDUCTOR	FOR FTZ	
	LF421	QQR0797-001	INDUCTOR	FOR FTZ	
	L4101	QQL231K-4R7Y	INDUCTOR	FOR FTZ	
	L4201	QQL231K-4R7Y	INDUCTOR	FOR FTZ	
	L9301	QQL29BJ-100Z	INDUCTOR		
	L9302	QQL29BJ-100Z	INDUCTOR		

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	L9303	QQL25CK-100Z	INDUCTOR		
	L9304	QQL231K-4R7Y	INDUCTOR		
	L9305	QQL231K-4R7Y	INDUCTOR		
	L9306	QQL231K-4R7Y	INDUCTOR		
	L9307	QQL231K-4R7Y	INDUCTOR		
	PP 1	QNZ0104-001	POST PIN		
	PP 2	QZW0010-002	STYLE PIN		
	PP 3	QZW0010-002	STYLE PIN		
	Q 1	2SC2668/O/-T	TRANSISTOR		
	Q 2	DTA114YKA-X	TRANSISTOR		
	Q 3	KTC3199/GL/-T	TR I/M		
	Q 4	KTC3199/GL/-T	TR I/M		
	Q 6	DTA114YKA-X	TRANSISTOR		
	Q1911	2SB1565/EF/	TRANSISTOR	MDM5.5V REGT	
	Q1913	2SC2785/FE/-T	TRANSISTOR		
	Q1914	2SC2785/FE/-T	TRANSISTOR		
	Q1931	2SC2001/LK/-T	TRANSISTOR		
	Q1941	2SA950/OY/-T	TR.I/M	MDD5V REG	
	Q1942	2SC2785/FE/-T	TRANSISTOR		
	Q4301	2SK105/EF/-T	FET I/M		
	Q4341	2SC2412K/RS/-X	CHIP TR.C.M		
	Q4342	2SC2412K/RS/-X	CHIP TR.C.M		
	Q4901	2SA1037AK/RS/-X	CHIP TR.C.M		
	Q4902	2SC2412K/RS/-X	CHIP TR.C.M		
	R 1	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 2	NRSA02J-820X	MG RESISTOR	82 5% 1/10W	
	R 3	NRSA02J-560X	MG RESISTOR	56 5% 1/10W	B,E,EN
	R 3	NRSA02J-121X	MG RESISTOR	120 5% 1/10W	EE
	R 10	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 12	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 13	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R 15	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 16	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 20	NRSA02J-331X	MG RESISTOR	330 5% 1/10W	
	R 21	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R 22	NRSA02J-331X	MG RESISTOR	330 5% 1/10W	
	R 23	NRSA02J-100X	MG RESISTOR	10 5% 1/10W	
	R 24	NRSA02J-271X	MG RESISTOR	270 5% 1/10W	
	R 25	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 26	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R 27	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R 29	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 30	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 31	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 36	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 37	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 38	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R 39	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R 42	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 43	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 44	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 45	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 46	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 48	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 52	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 54	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 55	NRSA02J-182X	MG RESISTOR	1.8K 5% 1/10W	
	R 56	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 57	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 60	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 61	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 65	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 66	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 68	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R 69	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 74	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 75	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R1911	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1915	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1916	QRE141J-564Y	C RESISTOR	560K 5% 1/4W	
	R1917	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R1918	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R1919	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1920	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1921	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1922	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R1931	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	
	R1932	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R1941	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R1942	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R1943	QRE141J-681Y	C RESISTOR	680 5% 1/4W	
	R1944	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R4101	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4102	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R4201	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4202	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R4301	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R4302	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4303	NRSA02J-394X	RES. C.M	390K 5% 1/10W	
	R4304	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R4305	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4307	QRE141J-270Y	C RESISTOR	27 5% 1/4W	
	R4321	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4322	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R4323	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4324	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R4325	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R4326	NRSA02J-273X	MG RESISTOR	27K 5% 1/10W	
	R4327	NRSA02J-184X	MG RESISTOR	180K 5% 1/10W	
	R4328	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4329	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4330	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4332	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4341	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R4342	NRSA02J-563X	RES. C.M	56K 5% 1/10W	
	R4343	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R4344	NRSA02J-221X	MG RESISTOR	220 5% 1/10W	
	R4345	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R4346	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R4347	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R4348	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R4349	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R4350	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R4351	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4352	NRSA02J-105X	MG RESISTOR	1.0M 5% 1/10W	
	R4353	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R4354	NRSA02J-182X	MG RESISTOR	1.8K 5% 1/10W	
	R4361	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4362	NRSA02J-203X	MG RESISTOR	20K 5% 1/10W	
	R4363	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R4364	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R4365	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4366	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R4901	NRSA02J-390X	MG RESISTOR	39 5% 1/10W	
	R4902	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R9101	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R9201	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	T 1	QQR0793-001	IFT		
	TU 1	QAU0034-001	FRONT END	FM TU	B,E,EN
	TU 1	QAU0036-001	FRONT END	FM TU	EE
	X 1	QAX0402-001	CRYSTAL		

■ TUNER P.C.B.(UB/US Version)

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 1	NCB21HK-223X	C CAPACITOR	.022MF 10% 50V	
	C 2	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 3	NCB21HK-473X	C CAPACITOR	.047MF 10% 50V	
	C 4	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 5	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 6	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 9	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 12	NDU21HJ-100X	C CAPACITOR		
	C 13	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 14	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 21	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 30	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 32	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 33	QEKC1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 34	NCS21HJ-150X	C CAPACITOR	15PF 5% 50V	
	C 35	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 36	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 37	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 39	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 40	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 41	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
	C 42	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
	C 44	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C 45	QEKC1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 46	NCB21HK-223X	C CAPACITOR	.022MF 10% 50V	
	C 47	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 49	NCB21HK-153X	C CAPACITOR	.015MF 10% 50V	
	C 50	NCB21HK-153X	C CAPACITOR	.015MF 10% 50V	
	C 51	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 52	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 60	QEKC1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 61	NCS21HJ-120X	C CAPACITOR	12PF 5% 50V	
	C 62	NCS21HJ-120X	C CAPACITOR	12PF 5% 50V	
	C 63	NCB21EK-473X	C CAPACITOR	.047MF 10% 25V	
	C 65	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 66	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C 68	NCS21HJ-101X	C CAPACITOR	100PF 5% 50V	
	C 69	QEK41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 70	NCB21HK-392X	C CAPACITOR	3900PF 10% 50V	
	C 71	QEKC1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 72	NCB21HK-102X	C CAPACITOR	1000PF 10% 50V	
	CF 1	QAX0419-001Z	C FILTER	FM IF	
	CF 2	QAX0419-001Z	C FILTER	FM IF	
	CF 3	QAX0418-001Z	C FILTER		
	CF 4	QAX0409-001	CERA LOCK		
	CN101	QGA2501C1-03	3P CONNECTOR		
	CN401	QGB1214J1-08S	CONNECTOR	TO MICOM PWB	
	CN402	QGB1214J1-10S	CONNECTOR	TO MICOM PWB	
	CN403	QGF1205C1-13	CONNECTOR	TO MAIN PWB	
	CN404	QGA2501C1-04	4P CONNECTOR	TO MAIN PWB	
	CN405	QGB2501K1-04	CONNECTOR	TO SC SP	
	CN406	QGB2020J1-10	CONNECTOR	TO EJECT SW	
	CN407	QGB1214J1-10S	CONNECTOR	TO MICOM PWB	
	CN901	QGF1016F1-21	CONNECTOR	TO MD UNIT	
	CN902	QGA2501F1-05	CONNECTOR	TO MD REG PWB	

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN903	QGB1214K1-10S	CONNECTOR	TO MICOM PWB	
	CN904	QGB1214K1-12S	CONNECTOR	TO MICON PWB	
	CN905	QGA2501C1-02	2P CONNECTOR	TO CD UNIT	
	CN906	QGA2501F1-08	CONNECTOR	TO MAIN PWB	
	CN907	QGA2001C1-04	4P PLUG ASSY		
	C1921	QETM1CM-228	E CAPA	2200MF 20% 16V	
	C1922	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C1923	QENC1HM-105Z	NP E CAPACITOR	1.0MF 20% 50V	
	C1924	QCBB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	C1925	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C1926	QET41AM-477	E CAPACITOR	470MF 20% 10V	
	C1931	QET41AM-227	E CAPACITOR	220MF 20% 10V	
	C1932	QET41AM-477	E CAPACITOR	470MF 20% 10V	
	C1941	QET41CM-226	E CAPACITOR	22MF 20% 16V	
	C1942	QDYB1CM-103Y	C CAPACITOR		
	C1943	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C4301	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4302	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4303	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
	C4304	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4305	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4321	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4322	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4323	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C4324	QFVF1HJ-274Z	TF CAPACITOR	.27MF 5% 50V	
	C4325	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4326	QFLM1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C4341	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C4342	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4343	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4344	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C4345	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4361	QFVJ1HJ-393Z	CAPACITOR	.039MF 5% 50V	
	C4362	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C4363	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C4364	QFVF1HJ-184Z	TF CAPACITOR	.18MF 5% 50V	
	C4365	QET41CM-107	E CAPACITOR	100MF 20% 16V	
	C4366	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C4367	QET41CM-226	E CAPACITOR	22MF 20% 16V	
	C4901	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C4902	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
	C9101	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C9201	NCS21HJ-102X	C CAPACITOR	1000PF 5% 50V	
	C9301	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C9302	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C9303	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
	C9304	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	D 1	1SS254-T2	SI DIODE		
	D 2	1SS254-T2	SI DIODE		
	D 3	1SS254-T2	SI DIODE		
	D 4	1SS254-T2	SI DIODE		
	D1921	1SS254-T2	SI DIODE		
	D1922	MTZJ5.6A-T2	ZENER DIODE		
	D1941	MTZJ4.3C-T2	Z.DIODE I.M		
	D1942	1SS254-T2	SI DIODE		

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D1943	1SS254-T2	SI DIODE		
	D4301	MTZJ4.7C-T2	Z.DIODE I.M		
	D4321	1SS254-T2	SI DIODE		
	D4322	1SS254-T2	SI DIODE		
	D4341	1SS254-T2	SI DIODE		
	D4342	1SS254-T2	SI DIODE		
	D4343	1SS254-T2	SI DIODE		
	D4344	1SS254-T2	SI DIODE		
	D4901	MTZJ3.9B-T2	Z DIODE		
	D4902	1SS254-T2	SI DIODE		
	D4903	1SS254-T2	SI DIODE		
	IC 1	TA2057N	IC		
	IC 2	LC72136N	IC		
	IC401	BA15218F-XE	IC	INPUT AMP	
	IC421	BA15218F-XE	IC	DISTOSION	
	IC441	BA15218F-XE	IC	COMPRESSER	
	IC461	BA15218F-XE	IC	HPF LPF	
	J 1	QNB0014-001	ANT TERMINAL	AM/FM ANT	
	K9301	QQR0779-001Z	INDUCTOR		
	K9302	QQR0779-001Z	INDUCTOR		
	K9303	QQR0779-001Z	INDUCTOR		
	K9304	QQR0779-001Z	INDUCTOR		
	L 1	QQR0796-001	COIL BLOCK	MW/LW RF/OSC	
	L 4	QQL231K-221Y	INDUCTOR		
	L9301	QQL29BJ-100Z	INDUCTOR		
	L9302	QQL29BJ-100Z	INDUCTOR		
	L9303	QQL25CK-100Z	INDUCTOR		
	L9304	QQL231K-4R7Y	INDUCTOR		
	L9305	QQL231K-4R7Y	INDUCTOR		
	L9306	QQL231K-4R7Y	INDUCTOR		
	L9307	QQL231K-4R7Y	INDUCTOR		
	PP 1	QNZ0104-001	POST PIN		
	PP 2	QZW0010-002	STYLE PIN		
	PP 3	QZW0010-002	STYLE PIN		
	Q 1	2SC2668/O/-T	TRANSISTOR		
	Q 6	DTA114YKA-X	TRANSISTOR		
	Q 7	2SA1037AK/RS/-X	CHIP TR.C.M		
	Q 8	2SA1037AK/RS/-X	CHIP TR.C.M		
	Q1911	2SB1565/EF/	TRANSISTOR	MDM5.5V REGT	
	Q1913	2SC2785/FE/-T	TRANSISTOR		
	Q1914	2SC2785/FE/-T	TRANSISTOR		
	Q1931	2SC2001/LK/-T	TRANSISTOR		
	Q1941	2SA950/OY/-T	TR.I/M	MDD5V REG	
	Q1942	2SC2785/FE/-T	TRANSISTOR		
	Q4301	2SK105/EF/-T	FET I/M		
	Q4341	2SC2412K/RS/-X	CHIP TR.C.M		
	Q4342	2SC2412K/RS/-X	CHIP TR.C.M		
	Q4901	2SA1037AK/RS/-X	CHIP TR.C.M		
	Q4902	2SC2412K/RS/-X	CHIP TR.C.M		
	R 1	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 2	NRSA02J-821X	MG RESISTOR	820 5% 1/10W	
	R 3	NRSA02J-0R0X	RES. C.M	5% 1/10W	
	R 10	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 12	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 13	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 20	NRSA02J-331X	MG RESISTOR	330 5% 1/10W	
	R 21	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R 22	NRSA02J-331X	MG RESISTOR	330 5% 1/10W	
	R 23	NRSA02J-270X	MG RESISTOR	27 5% 1/10W	
	R 24	NRSA02J-271X	MG RESISTOR	270 5% 1/10W	
	R 25	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 27	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R 29	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 30	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 31	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 32	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 34	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R 35	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R 36	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R 37	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 38	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R 39	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R 42	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 43	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 44	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 45	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 46	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R 48	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 52	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 54	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 55	NRSA02J-182X	MG RESISTOR	1.8K 5% 1/10W	
	R 56	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 57	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 66	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 68	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R 69	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R1911	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1915	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1916	QRE141J-564Y	C RESISTOR	560K 5% 1/4W	
	R1917	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R1918	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R1919	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1920	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1921	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1922	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R1931	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	
	R1932	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R1941	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R1942	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R1943	QRE141J-681Y	C RESISTOR	680 5% 1/4W	
	R1944	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R4101	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4201	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4301	NRSA02J-473X	MG RESISTOR	47K 5% 1/10W	
	R4302	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4303	NRSA02J-394X	RES. C.M	390K 5% 1/10W	
	R4304	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R4305	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4307	QRE141J-270Y	C RESISTOR	27 5% 1/4W	
	R4321	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R4322	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R4323	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4324	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R4325	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R4326	NRSA02J-273X	MG RESISTOR	27K 5% 1/10W	
	R4327	NRSA02J-184X	MG RESISTOR	180K 5% 1/10W	
	R4328	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4329	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4330	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4332	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4341	NRSA02J-224X	RES. C.M	220K 5% 1/10W	
	R4342	NRSA02J-563X	RES. C.M	56K 5% 1/10W	
	R4343	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R4344	NRSA02J-221X	MG RESISTOR	220 5% 1/10W	
	R4345	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R4346	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R4347	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R4348	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W	
	R4349	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R4350	NRSA02J-103X	RES. C.M	10K 5% 1/10W	
	R4351	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4352	NRSA02J-105X	MG RESISTOR	1.0M 5% 1/10W	
	R4353	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R4354	NRSA02J-182X	MG RESISTOR	1.8K 5% 1/10W	
	R4361	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R4362	NRSA02J-203X	MG RESISTOR	20K 5% 1/10W	
	R4363	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R4364	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R4365	NRSA02J-101X	MG RESISTOR	100 5% 1/10W	
	R4366	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R4901	NRSA02J-390X	MG RESISTOR	39 5% 1/10W	
	R4902	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R9101	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R9201	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	T 1	QQR0793-001	IFT		
	TU 1	QAU0037-001	FRONT END	FM TU	
	X 1	QAX0402-001	CRYSTAL		

■ CD AMP P.C.B.

BLOCK NO. 05

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 604	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 605	QET41EM-106	E CAPACITOR	10MF 20% 25V	
	C 606	QDGB1HK-102Y	C CAPACITOR		
	C 607	QDGB1HK-102Y	C CAPACITOR		
	C 608	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 609	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C 610	QFLC1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C 611	QDXB1CM-222Y	C CAPACITOR		
	C 612	QDYB1CM-103Y	C CAPACITOR		
	C 613	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 614	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C 615	QDVB1EZ-223Y	C CAPACITOR		
	C 616	QDVB1EZ-223Y	C CAPACITOR		
	C 617	QDVB1EZ-223Y	C CAPACITOR		
	C 618	QDXB1CM-222Y	C CAPACITOR		
	C 619	QCBB1HK-271Y	C CAPACITOR	270PF 10% 50V	
	C 620	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
	C 621	QDGB1HK-821Y	C CAPACITOR		
	C 622	QET41AM-476	E CAPACITOR	47MF 20% 10V	
	C 623	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C 628	QDX31EM-473Z	C CAPACITOR		
	C 629	QET41AM-107	E CAPACITOR	100MF 20% 10V	
	C 631	QET41AM-477	E CAPACITOR	470MF 20% 10V	
	C 632	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 651	QCS11HJ-120	C CAPACITOR	12PF 5% 50V	
	C 652	QCS11HJ-120	C CAPACITOR	12PF 5% 50V	
	C 653	QDVB1EZ-223Y	C CAPACITOR		
	C 655	QDX31EM-473Z	C CAPACITOR		
	C 661	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V	
	C 662	QDVB1EZ-223Y	C CAPACITOR		
	C 663	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C 664	QDVB1EZ-223Y	C CAPACITOR		
	C 665	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 671	QDXB1CM-222Y	C CAPACITOR		
	C 672	QDXB1CM-222Y	C CAPACITOR		
	C 673	QET41CM-227	E CAPACITOR	220MF 20% 16V	
	C 674	QDVB1EZ-223Y	C CAPACITOR		
	C 675	QDGB1HK-102Y	C CAPACITOR		
	C 676	QDGB1HK-102Y	C CAPACITOR		
	C 691	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 692	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 693	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 694	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 698	QDGB1HK-102Y	C CAPACITOR		
	CN601	QGF1008F1-15	21-41 CONNECTOR	TO RF	
	CN602	QGA2001C1-06	6P PLUG ASSY	TO MOTOR	
	CN603	QGF1205F1-07	CONNECTOR	TO AUDIO	
	CN604	QGF1205F1-12	CONNECTOR	TO MICON	
	CN605	QGA2501F1-03	CONNECTOR	TO DIGITAL OUT	
	D 661	1SS254-T2	SI DIODE		
	IC601	AN8806SB	IC	RF AMP	
⚠	IC602	BA6897FP-W	IC	DRIVER	
	IC603	MN35510	IC	1CHIP PROCESSER	
	Q 601	2SA952/LK/-T	TRANSISTOR		
	Q 631	2SA952/LK/-T	TRANSISTOR		

BLOCK NO. 05

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 601	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 603	QRE141J-125Y	C.RES. I.M	1.2M 5% 1/4W	
	R 605	QRE141J-134Y	C.RES. I.M	130K 5% 1/4W	
	R 606	QRE141J-913Y	C.RES. I.M	91K 5% 1/4W	
	R 607	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 609	QRE141J-114Y	C.RES. I.M	110K 5% 1/4W	
	R 610	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	R 612	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 613	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R 614	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	R 615	QRE141J-120Y	C RESISTOR	12 5% 1/4W	
	R 616	QRE141J-910Y	C RESISTOR	91 5% 1/4W	
	R 621	QRE141J-330Y	C RESISTOR	33 5% 1/4W	
	R 622	QRE141J-330Y	C RESISTOR	33 5% 1/4W	
	R 623	QRE141J-330Y	C RESISTOR	33 5% 1/4W	
	R 631	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 632	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 633	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 641	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 642	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 643	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R 644	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 645	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 646	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R 647	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 651	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 652	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 653	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 654	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 655	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 656	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 659	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R 661	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 662	QRE141J-155Y	C RESISTOR	1.5M 5% 1/4W	
	R 663	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R 664	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 666	QRE141J-220Y	C RESISTOR	22 5% 1/4W	
	R 671	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 672	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	X 651	QAX0007-001Z	RESONATOR I.M	16.9344MHZ	

■ CD Loading P.C.B.

BLOCK NO. 06

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 831	QEKC1CM-107Z	AL E.CAPACITOR	100MF 20% 16V	
	C 837	QEKC1CM-107Z	AL E.CAPACITOR	100MF 20% 16V	
	C 838	QEKC1CM-107Z	AL E.CAPACITOR	100MF 20% 16V	
	CN505	QGF1205F1-07	CONN.TERMINAL		
	D 812	1SR35-100A	SI DIODE		
	IC802	BA6208A	I.C(MONO-ANA)		
	L 805	QQL01BK-100Z	INDUCTOR		
	L 806	QQL01BK-100Z	INDUCTOR		
	S 851	QSW0472-001	LEVER SWITCH		

■ MD Servo P.C.B.

BLOCK NO. 07

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 300	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 302	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 307	NCB31HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 310	NCB31HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 311	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 312	NEA20GM-476NZ	E CAPACITOR	47MF 20%	
	C 314	NCB31CK-223X	C CAPACITOR	.022MF 10% 16V	
	C 315	NCB31HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 316	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 318	NCB31HK-682X	C CAPACITOR	6800PF 10% 50V	
	C 319	NCB31CK-333X	C CAPACITOR	.033MF 10% 16V	
	C 320	NCB21AK-105X	C CAPACITOR	1.0MF 10% 10V	
	C 321	NCB31HK-472X	C CAPACITOR	4700PF 10% 50V	
	C 322	NCB21AK-105X	C CAPACITOR	1.0MF 10% 10V	
	C 323	NCB31HK-682X	C CAPACITOR	6800PF 10% 50V	
	C 324	NCB21CK-224X	C CAPACITOR	.22MF 10% 16V	
	C 325	NCB31CK-103X	C CAPACITOR	.010MF 10% 16V	
	C 326	NCB31CK-223X	C CAPACITOR	.022MF 10% 16V	
	C 327	NCB31CK-104X	C CAPACITOR	.10MF 10% 16V	
	C 328	NCB31CK-104X	C CAPACITOR	.10MF 10% 16V	
	C 330	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 333	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 334	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 340	NCB31CK-223X	C CAPACITOR	.022MF 10% 16V	
	C 341	NCB31CK-223X	C CAPACITOR	.022MF 10% 16V	
	C 342	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 350	NEA20GM-476NZ	E CAPACITOR	47MF 20%	
	C 351	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 352	NEA20GM-476NZ	E CAPACITOR	47MF 20%	
	C 353	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 354	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 355	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 356	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 357	NCS21HJ-100X	C CAPACITOR	10PF 5% 50V	
	C 358	NCS21HJ-100X	C CAPACITOR	10PF 5% 50V	
	C 359	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 361	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 371	NCS31HJ-100X	C CAPACITOR	10PF 5% 50V	
	C 372	NCS31HJ-100X	C CAPACITOR	10PF 5% 50V	
	C 375	NCB31CK-103X	C CAPACITOR	.010MF 10% 16V	
	C 376	NCB21CK-474X	C CAPACITOR	.47MF 10% 16V	
	C 377	NCS31HJ-471X	C CAPACITOR	470PF 5% 50V	
	C 379	NCB21CK-474X	C CAPACITOR	.47MF 10% 16V	
	C 380	NCB31CK-153X	C CAPACITOR	.015MF 10% 16V	
	C 381	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 382	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 390	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 400	NEA20JM-226NZ	E CAPACITOR	22MF 20% 6.3V	
	C 401	NEA20JM-107NZ	E CAPACITOR	100MF 20% 6.3V	
	C 402	NCB31HK-331X	C CAPACITOR	330PF 10% 50V	
	C 403	NEA20GM-476NZ	E CAPACITOR	47MF 20%	
	C 404	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 410	NEA20JM-107NZ	E CAPACITOR	100MF 20% 6.3V	
	C 411	NCF31AZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 412	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	

BLOCK NO. 07

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 421	NCB31HK-561X	C CAPACITOR	560PF 10% 50V	
	C 423	NCB31HK-561X	C CAPACITOR	560PF 10% 50V	
	C 425	NCB31HK-561X	C CAPACITOR	560PF 10% 50V	
	C 427	NCB31HK-561X	C CAPACITOR	560PF 10% 50V	
	C 429	NCB31HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 431	NCB31HK-102X	C CAPACITOR	1000PF 10% 50V	
	C 433	NCB31HK-562X	C CAPACITOR	5600PF 10% 50V	
	C 435	NCB31HK-562X	C CAPACITOR	5600PF 10% 50V	
	C 437	NCB31CK-103X	C CAPACITOR	.010MF 10% 16V	
	C 439	NCB31CK-103X	C CAPACITOR	.010MF 10% 16V	
	C 450	NEA20JM-107NZ	E CAPACITOR	100MF 20% 6.3V	
	C 451	NEA20GM-107NZ	E CAPACITOR	100MF 20%	
	C 452	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 453	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 455	NDC32AJ-101X	C CAPACITOR		
	C 480	NEA20JM-476NZ	E CAPACITOR	47MF 20% 6.3V	
	C 481	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 482	NEA20JM-226NZ	E CAPACITOR	22MF 20% 6.3V	
	C 483	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 484	NEA21CM-106NZ	E CAPACITOR	10MF 20% 16V	
	C 485	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 486	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 487	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 488	NEA21CM-106NZ	E CAPACITOR	10MF 20% 16V	
	C 490	NCB31CK-103X	C CAPACITOR	.010MF 10% 16V	
	C 491	NCB31HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 492	NCB31HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 493	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20%	
	C 501	NCS21HJ-220X	C CAPACITOR	22PF 5% 50V	
	C 502	NCS21HJ-220X	C CAPACITOR	22PF 5% 50V	
	C 511	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 512	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 515	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	C 591	NCF31CZ-104X	C CAPACITOR	.10MF +80:-20%	
	CN321	QGF0501F2-21X	CONNECTOR C.M		
	CN407	QGA2001F2-07X	SOCKET		
	CN408	QGA2001F2-08X	SOCKET		
	CN521	QGF1006F2-21W	SOCKET		
	D 310	1SS355-X	DIODE C.M		
	D 451	SC802-06-X	DIODE		
	D 452	SC802-06-X	DIODE		
	IC310	CXA2523AR	IC		
	IC340	TC7S08F-W	IC		
	IC350	CXD2652AR	IC		
	IC390	MN41V4400TT-08	IC		
	IC410	M56758FP-X	IC 5CH DRIVER		
	IC450	BD7910FV-X	IC M.HEAD DRIVE		
	IC480	AK4520A-VF-X	IC A/D.D/A CONV		
	IC485	TK71340M-W	IC 4.0V REG		
	IC500	HD6433045SV06F	MPU		
	IC590	AK93C45AF-W	IC		
	K 391	NQR0265-003X	FERRITE BEADS		
	K 491	NQR0129-004X	FERRITE BEADS		
	K 492	NQR0129-004X	FERRITE BEADS		
	K 495	NQR0129-004X	FERRITE BEADS		

BLOCK NO. 07

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	K 496	NQR0129-004X	FERRITE BEADS		
	K 521	NQR0155-002X	INDUCTOR		
	K 522	NQR0155-002X	INDUCTOR		
	K 523	NQR0129-002X	FERRITE BEADS		
	K 524	NRSA63J-0R0X	MG RESISTOR	5%	
	L 525	NQL114M-1R0X	INDUCTOR		
	L 526	NQL114M-1R0X	INDUCTOR		
	Q 330	2SA1362/G/-X	TRANSISTOR		
	Q 331	DTA114EKA-X	DIGITAL.TR		
	Q 332	DTA113ZKA-X	TRANSISTOR		
	Q 333	DTA113ZKA-X	TRANSISTOR		
	Q 400	2SA1363/EF/-X	CHIP TRANSISTOR		
	Q 401	2SC2411K/QR/-X	CHIP TRANSISTOR		
	Q 402	DTA113ZKA-X	TRANSISTOR		
	R 300	NRSA63J-0R0X	MG RESISTOR	5%	
	R 301	NRSA63J-0R0X	MG RESISTOR	5%	
	R 302	NRSA63J-0R0X	MG RESISTOR	5%	
	R 303	NRSA63J-122X	MG RESISTOR	1.2K 5%	
	R 305	NRSA63J-222X	MG RESISTOR	2.2K 5%	
	R 306	NRSA63J-474X	MG RESISTOR	470K 5%	
	R 309	NRSA63J-474X	MG RESISTOR	470K 5%	
	R 310	NRSA63J-331X	MG RESISTOR	330 5%	
	R 311	NRSA63J-183X	MG RESISTOR	18K 5%	
	R 312	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 313	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 314	NRSA63J-133X	MG RESISTOR	13K 5%	
	R 315	NRSA63J-243X	MG RESISTOR	24K 5%	
	R 316	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 317	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 320	NRSA63J-563X	MG RESISTOR	56K 5%	
	R 321	NRSA63J-331X	MG RESISTOR	330 5%	
	R 322	NRSA63J-331X	MG RESISTOR	330 5%	
	R 323	NRSA63J-331X	MG RESISTOR	330 5%	
	R 324	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 325	NRSA63J-472X	MG RESISTOR	4.7K 5%	
	R 326	NRSA63J-331X	MG RESISTOR	330 5%	
	R 327	NRSA63J-331X	MG RESISTOR	330 5%	
	R 328	NRSA63J-101X	MG RESISTOR	100 5%	
	R 330	NRSA63J-0R0X	MG RESISTOR	5%	
	R 331	NRSA63J-220X	MG RESISTOR	22 5%	
	R 336	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 337	NRSA63J-1R0X	MG RESISTOR	1.0 5%	
	R 338	NRSA63J-4R7X	MG RESISTOR	4.7 5%	
	R 340	NRSA63J-222X	MG RESISTOR	2.2K 5%	
	R 341	NRSA63J-222X	MG RESISTOR	2.2K 5%	
	R 342	NRSA63J-222X	MG RESISTOR	2.2K 5%	
	R 351	NRSA63J-100X	MG RESISTOR	10 5%	
	R 352	NRSA63J-100X	MG RESISTOR	10 5%	
	R 353	NRSA63J-105X	MG RESISTOR	1.0M 5%	
	R 354	NRVA63D-103X	MF RESISTER	10K	
	R 355	NRVA63D-103X	MF RESISTER	10K	
	R 361	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 362	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 363	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 364	NRSA63J-102X	MG RESISTOR	1.0K 5%	

BLOCK NO. 07

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 365	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 366	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 367	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 368	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 369	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 370	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 371	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 372	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 375	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 376	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 377	NRSA63J-684X	MG RESISTOR	680K 5%	
	R 378	NRSA63J-332X	MG RESISTOR	3.3K 5%	
	R 379	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 380	NRSA63J-105X	MG RESISTOR	1.0M 5%	
	R 381	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 382	NRSA63J-151X	MG RESISTOR	150 5%	
	R 389	NRSA63J-331X	MG RESISTOR	330 5%	
	R 391	NRSA63J-152X	MG RESISTOR	1.5K 5%	
	R 392	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 393	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 394	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 395	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 396	NRSA63J-331X	MG RESISTOR	330 5%	
	R 397	NRSA63J-331X	MG RESISTOR	330 5%	
	R 401	NRVA63D-123X	MG RESISTOR	12K	
	R 402	NRVA63D-512X	MG RESISTOR	5.1K	
	R 403	NRSA63J-0R0X	MG RESISTOR	5%	
	R 404	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 420	NRVA63D-223X	MF RESISTER	22K	
	R 421	NRVA63D-103X	MF RESISTER	10K	
	R 422	NRVA63D-223X	MF RESISTER	22K	
	R 423	NRVA63D-103X	MF RESISTER	10K	
	R 424	NRVA63D-223X	MF RESISTER	22K	
	R 425	NRVA63D-103X	MF RESISTER	10K	
	R 426	NRVA63D-223X	MF RESISTER	22K	
	R 427	NRVA63D-103X	MF RESISTER	10K	
	R 428	NRVA63D-223X	MF RESISTER	22K	
	R 429	NRVA63D-103X	MF RESISTER	10K	
	R 430	NRVA63D-223X	MF RESISTER	22K	
	R 431	NRVA63D-103X	MF RESISTER	10K	
	R 432	NRVA63D-223X	MF RESISTER	22K	
	R 433	NRVA63D-822X	MF RESISTER	8.2K	
	R 434	NRVA63D-223X	MF RESISTER	22K	
	R 435	NRVA63D-822X	MF RESISTER	8.2K	
	R 436	NRSA63J-223X	MF RESISTER	22K 5%	
	R 437	NRSA63J-302X	MG RESISTOR	3.0K 5%	
	R 438	NRSA63J-223X	MF RESISTER	22K 5%	
	R 439	NRSA63J-302X	MG RESISTOR	3.0K 5%	
	R 451	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 452	NRSA63J-682X	MG RESISTOR	6.8K 5%	
	R 453	NRSA63J-1R0X	MG RESISTOR	1.0 5%	
	R 454	NRSA63J-1R0X	MG RESISTOR	1.0 5%	
	R 455	NRSA63J-223X	MF RESISTER	22K 5%	
	R 481	NRSA63J-100X	MG RESISTOR	10 5%	
	R 483	NRSA63J-0R0X	MG RESISTOR	5%	

BLOCK NO. 07

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 485	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 491	NRSA63J-471X	MG RESISTOR	470 5%	
	R 492	NRSA63J-471X	MG RESISTOR	470 5%	
	R 495	NRSA63J-471X	MG RESISTOR	470 5%	
	R 496	NRSA63J-471X	MG RESISTOR	470 5%	
	R 501	NRSA63J-105X	MG RESISTOR	1.0M 5%	
	R 502	NRSA63J-561X	MG RESISTOR	560 5%	
	R 503	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 504	NRSA63J-333X	MG RESISTOR	33K 5%	
	R 505	NRSA63J-4R7X	MG RESISTOR	4.7 5%	
	R 510	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 511	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 512	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 513	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 514	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 515	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 516	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 517	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 518	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 519	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 520	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 521	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 522	NRSA63J-222X	MG RESISTOR	2.2K 5%	
	R 523	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 524	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 525	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 531	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 532	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 533	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 534	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 535	NRSA63J-103X	MG RESISTOR	10K 5%	
	R 549	NRSA63J-0R0X	MG RESISTOR	5%	
	R 551	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 552	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 553	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 554	NRSA63J-104X	MG RESISTOR	100K 5%	
	R 555	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 556	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 557	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 558	NRSA63J-102X	MG RESISTOR	1.0K 5%	
	R 559	NRSA63J-333X	MG RESISTOR	33K 5%	
	R 560	NRSA63J-333X	MG RESISTOR	33K 5%	
	R 561	NRSA63J-333X	MG RESISTOR	33K 5%	
	R 562	NRSA63J-333X	MG RESISTOR	33K 5%	
	R 563	NRSA63J-333X	MG RESISTOR	33K 5%	
	R 591	NRSA63J-220X	MG RESISTOR	22 5%	
	R 592	NRSA63J-104X	MG RESISTOR	100K 5%	
	X 350	NAX0160-001X	CRYSTAL		
	X 500	NAX0159-001X	CRYSTAL		

■ MD Loading P.C.B.

BLOCK NO. 08

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	S003	QSW0472-001	SWITCH		
	CN002	EWS267-F908	SKT WIRE ASSY		

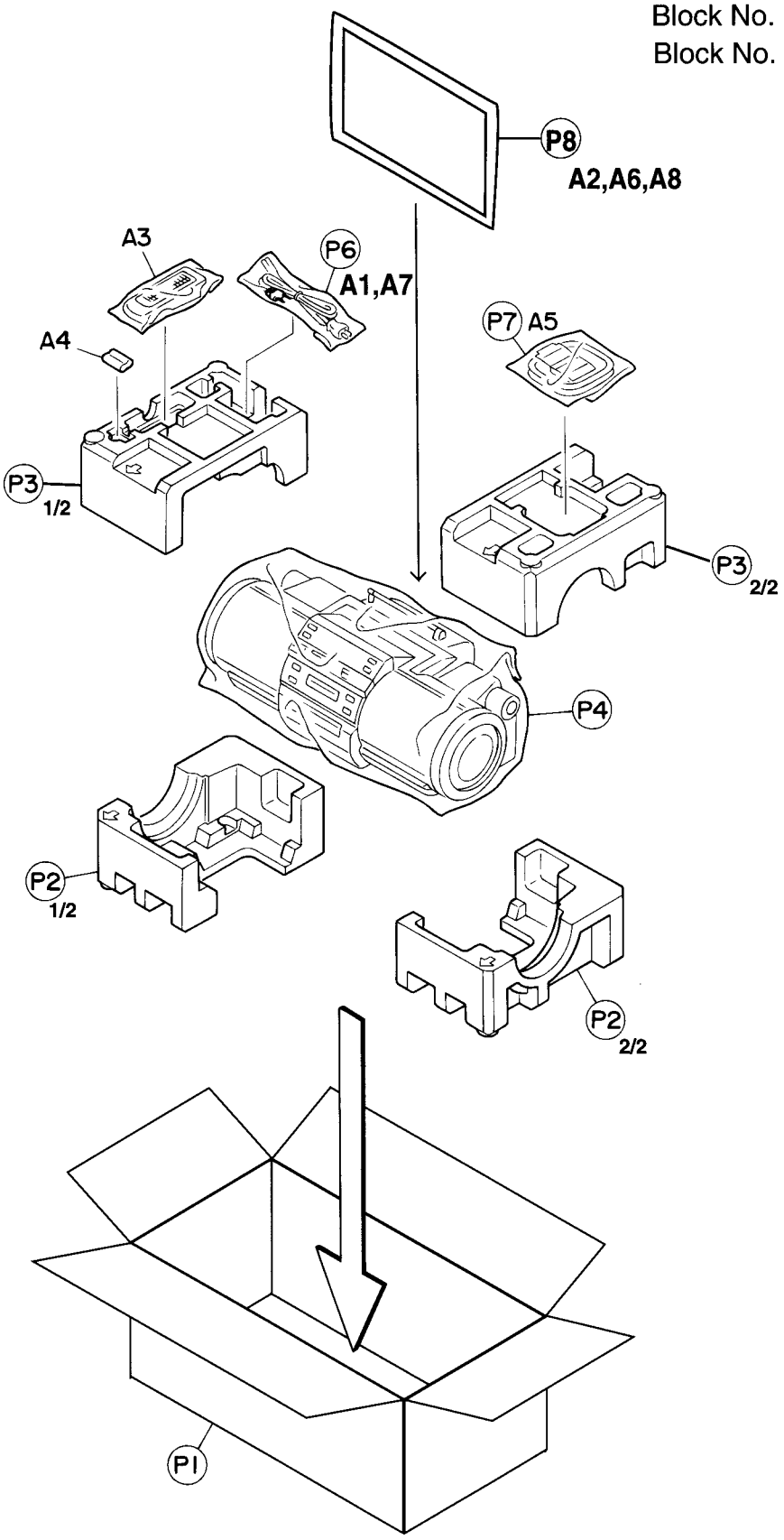
■ MD Swith P.C.B.

BLOCK NO. 09

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	S001	QSW0104-001	SWITCH		
	CN001	EWS268-F911	SKT WIRE ASSY		

Packing Materials and Accessories Parts List

Block No. M 5 M M
Block No. M 6 M M



■Packing Parts List

BLOCK NO. M5MM[ ][ ][ ]

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	LV30531-002A	CARTON		1		
	P 2	LV10105-001A	CUSHION BOTTOM		1		
	P 3	LV10106-001A	CUSHION UPPER		1		
	P 4	VPE3026-001	POLY BAG		1		
	P 6	QPA01503503	POLY BAG	FOR POWER CORD	1	B,UB	
		QPA01202505	POLY BAG	FOR POWER CORD	1	E,EN,EE,US	
	P 7	QPC01702515P	POLY BAG	FOR LOOP ANT.	1		
	P 8	QPA02503503P	POLY BAG	FOR INST	1		

■Accessories Parts List

BLOCK NO. M6MM[ ][ ][ ]

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
⚠	A 1	QMP5520-183E	POWER CORD		1	B	
⚠		QMP39F0-183E	POWER CORD		1	E,EN,EE,US	
⚠		QMPP060-183-JD	POWER CORD		1	UB	
	A 2	BT-54008-2	W.CARD		1	B,E,EN	
		BT-54012-1	W.CARD		1	EE	
	A 3	RM-RXMD5E	REMOCON		1		
	A 4	----------	BATTERY		1		
	A 5	QAL0014-001	AM LOOP ANT		1		
	A 6	LVT0107-005A	INSTRUCTIONS	ARA,POR	1	UB,US	
		LVT0107-002A	INSTRUCTIONS	DUT,SPA,ITA	1	E	
		LVT0107-003A	INSTRUCTIONS	GER,FRE,DUT,	1	EN	
		LVT0107-003A	INSTRUCTIONS	SWE,FIN,DAN	1	EN	
		LVT0107-004A	INSTRUCTIONS	RUS	1	EE	
		LVT0107-005A	INSTRUCTIONS	ENG,SPA,CHI,	1	UB,US	
		LVT0107-006A	INSTRUCTIONS	ENG	1	B	
		LVT0107-002A	INSTRUCTIONS	ENG,GER,FRE,	1	E	
⚠	A 7	QAM0060-001	SIEMENS PLUG		1	US	
	A 8	LV30258-041A	UB SHEET		1	UB	